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**FROM THE
UNITED STATES GOVERNMENT**

**REPORTS OF THE
DEPARTMENT OF THE INTERIOR**

FOR THE FISCAL YEAR ENDED JUNE 30

1919



**VOLUME II
INDIAN AFFAIRS
TERRITORIES**



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**REPORT OF THE COMMISSIONER OF
INDIAN AFFAIRS**

1

REPORT OF THE COMMISSIONER OF INDIAN AFFAIRS.

DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
Washington, D. C., September 30, 1919.

SIR: I have the honor to submit this, the eighty-eighth annual report of the Bureau of Indian Affairs, for the fiscal year ended June 30, 1919.

RELEASING INDIANS FROM GOVERNMENT SUPERVISION.

COMPETENCY.—For several years I have recognized as of urgent administrative importance the separation of competent Indians from the incompetent and their release from Government control. The main agencies in the accomplishment of this end are the work of field competency commissions, and a consistent practice of the general policy of declaring competent all Indians of one-half or less Indian blood who are able-bodied, 21 years of age, and not mentally deficient. The result of these activities shows that during the fiscal years 1917, 1918, and 1919, 10,956 Indians have been declared competent. The effect of the new policy on the issuance of fee patents is clearly shown by reason of the fact that under the acts of Congress approved May 8, 1906 (34 Stats. L., 182), and June 25, 1910 (36 Stats. L., 855), 9,894 fee patents were issued to Indians from 1906 to 1916, a period of 10 years, while during the past 3 years there have been issued 10,956 fee simple patents. Consequently, there have been issued more fee simple patents to Indians under the new policy within a period of 3 years than during the preceding 10 years.

There is no longer any doubt that with adequate provision for the expense of proper inquiry as to competency and with faithful adherence to the broadened declaration of policy we shall speedily sift the Indian who should stand on his own merits, pay taxes, discharge the service and exercise the freedom of citizenship, from those who will require the protection of the Government for some time before taking on such responsibilities.

Of the large number of Indians still under the supervision of this bureau, it should be understood that fully 75,000 are situated practically the same as the reservation Navajo, Hualapai, Hopi, and

Apache in Arizona, whose property can not now, nor for many years to come, be wisely allotted. There are thousands of full-bloods, and near full-bloods, whose landed interests and whose personal possessions and prospects are suggestive of a capacity for independent self-support, but who are not qualified to withstand the competitive tests that would follow a withdrawal of federal guidance. To abandon these at the point in their progress where elementary acquirements are shaping into self-reliance and a comprehension of practical methods, would be to leave them a prey to every kind of unscrupulous trickery that masks itself in the conventions of civilization.

I shall not be outdone by anyone who would hasten Indian progress by the extension of freedom and obligation to those who are ready for this status, nor shall I be swerved from what I believe to be a course of just aid and protection to the less fortunate and less progressive Indian.

PATENTS IN FEE.—Within the year 4,679 applications for fee patents were received, of which 344 were denied and 4,376 approved, involving an area of 778,698 acres.

In the declaration of policy, issued April 17, 1917, I announced that greater liberalism would thenceforth prevail in Indian administration, to the end that every Indian as soon as he had been determined to be competent to transact his own business affairs would be given full control of his property and have all his lands and moneys turned over to him, after which he would no longer be a ward of the Government.

This movement brought justifying results and on March 7, 1919, I addressed the following letter to the superintendents of various Indian reservations:

You are requested to submit to this office, at the earliest practicable date, a list of all Indians of one-half or less Indian blood, who are able-bodied and mentally competent, 21 years of age or over, together with a description of the land allotted to said Indians, and the number of the allotment. It is intended to issue patents in fee simple to such Indians. Advise the office at once the approximate date when this list can be furnished.

This order was mailed to all superintendents having jurisdiction over Indians holding land under trust patents, and from the lists that have been submitted it is apparent that approximately 4,500 fee patents will be issued to Indian allottees under this order.

The attention of the Indian Office is now being directed to the clearing up of inherited estates. Many of these allotments were made 35 years ago and the 25-year trust period has been extended for an additional 10 years on many Indian reservations. Of all the Indian land that has been allotted approximately 50 per cent of it is now held by heirs. In many cases there are twenty or more heirs

and for the purpose of settling up these estates and bringing them within the declaration of policy, the following order was promulgated:

To superintendents:

Your attention is invited to the provisions of the act of June 25, 1910 (36 Stats. L., 855) regarding the disposition of inherited Indian estates. The act provides:

"That when an Indian to whom an allotment of land has been made, or may hereafter be made, dies before the expiration of the trust period and before the issuance of a fee simple patent, without having made a will disposing of said allotment as herein after provided, the Secretary of the Interior, upon notice and hearing, under such rules as he may prescribe, shall ascertain the legal heirs of such decedent, and his decision thereon shall be final and conclusive. If the Secretary of the Interior decides the heir or heirs of such decedent competent to manage their own affairs, he shall issue to such heir or heirs a patent in fee for the allotment of such decedent; if he shall decide one or more of the heirs to be incompetent he may in his discretion, cause such lands to be sold: *Provided*, That if the Secretary of the Interior shall find the lands of the decedent are capable of partition to the advantage of the heirs, he may cause the shares of such as are competent, upon their petition, to be set aside and patents in fee to be issued to them therefor."

That part of the act which relates to the partition of Indian estates was modified by the act of May 18, 1916 (39 Stats. L., 123-127), which provides:

"*Provided further*, That if the Secretary of the Interior shall find that any inherited trust allotment or allotments are capable of partition to the advantage of the heirs, he may cause such lands to be partitioned among them, regardless of their competency, patents in fee to be issued to the competent heirs for their shares and trust patents to be issued to the incompetent heirs for the lands respectively, or jointly set apart to them, the trust period to terminate in accordance with the terms of the original patent or order of extension of the trust period set out in said patent."

It will thus be noted that in all inherited Indian estates where the land is held in trust there is authority of law to issue patents in fee to the heirs, if competent; to partition the land, if it appears to the interest of the heirs to do so, and issue fee patents to the competent heirs, and trust patents to incompetents, or to sell the land.

Examiners of inheritance have visited the various Indian reservations, held hearings, the evidence and findings have been presented to this office and passed upon, and the heirs have been determined in accordance with the act of June 25, 1910, above cited.

The records of this office show that throughout the Indian country there are approximately 20,000 Indian estates where the heirs have been determined.

It is the purpose of the office to make an extra effort to settle and close up the inherited estates, where the heirs have been determined, either by the issuance of fee patents, or the partitionment or sale of the land.

Under the law disposition may be made of these estates whether or not the Indian owners make application to dispose of them, but it is not the purpose of the office to compel the sale or partitionment of inherited estates, if it is manifest that it is not for the interest of the heirs.

The following instructions were issued to those having to do with inherited lands:

(1) Any Indian who has been found competent and has received a patent in fee covering his own allotment may be given a patent in fee covering all of his inherited land. If he is an adult, able-bodied Indian of one-half or less Indian blood, and mentally competent, he should be recommended for a patent to all of his land, allotted and inherited. To segregate the interests of competent heirs, it may be necessary to partition the estate, if the land is capable of partition.

(2) Where incompetent or old and feeble Indians are the heirs to Indian estates, the land should be offered for sale, and, if sold, the funds used for their support, or for the improvement of their allotted lands.

(3) In all cases where there are a great many heirs to the estate, and it is not practicable to partition it, the land should be offered for sale.

You are directed to go carefully over the list of inherited estates under your jurisdiction, where the heirs have been determined, and submit applications for fee patents covering all cases that may come under class 1 with your report thereon. You are also directed to take up the other inherited estates where heirs have been determined at an early date, with a view of partitioning the lands or offering them for sale.

These instructions relate principally to the mass of cases heretofore decided. It is not proposed to dispose of estates immediately after the heirs have been determined, particularly in estates where the inheritance case is a contested one. In other words, before attempting to clean up the new cases, a reasonable time must be allowed for filing motions for review.

CITIZENSHIP.

The question of Indian citizenship has become of foremost interest, and has been the subject of several bills recently introduced in Congress.

As far back as 1817 provision was made in a treaty with the Cherokees by which any member of that tribe who desired might become a citizen of the United States. Subsequent treaties and acts of Congress contained provisions by which members of other tribes might become citizens.

The question whether under the fourteenth amendment to the Constitution an Indian could, by severing his tribal relations, and completely surrendering himself to the jurisdiction of the United States become a citizen thereof was determined in the negative by the Supreme Court in *Elk v. Wilkins* (112 U. S., 100).

No general law provided a means for citizenship of all Indians until 1887 when Congress passed the general allotment act (24 Stats. L., 388), which provided for the allotment of lands in severalty and declared all Indians born within its limits who shall have complied with certain conditions, to be citizens of the United States. The broad citizenship provisions of this act were modified by Congress when on May 8, 1906, it passed the Burke Act, since which law the issuance of a fee-simple patent has been the primary legal requirement for citizenship of Indians. In my judgment, the controlling factor in granting citizenship to Indians should not be based upon their ownership of

lands, tribal or in severalty, in trust or in fee, but upon the fact that they are real Americans and are of right entitled to such citizenship.

The act of 1887 excluded from its provisions as to citizenship members of the Five Civilized Tribes, but on March 3, 1901 (31 Stats. L., 1447), Congress amended the sixth section of the general allotment act by inserting after the phrase "and has adopted the habits of civilized life" the words and "every Indian in the Indian Territory." Under this amendment, 101,000 Indians of the Five Tribes who received allotments and now living, and their children, are citizens of the United States.

Citizen Indians are not only entitled to look to the United States for protection in their rights as citizens, but also to the States in which they reside for protection in the exercise of the privileges guaranteed to them as citizens thereof, which are distinct from those of citizens of the United States. In the language of Mr. Justice Washington, in the case of *Corfield v. Coryell* (4 Washington's Circuit Court, 371), they are confined to "those privileges and immunities which are *fundamental*, which belong of right to the citizens of all free governments, and which have at all times been enjoyed by citizens of the several States which compose the Union from the time of their becoming free, independent, and sovereign. What these fundamental principles are it would be more tedious than difficult to enumerate. They may all, however, be comprehended under the following general heads: Protection by the Government, with the right to acquire and possess property of every kind, and to pursue and obtain happiness and safety, subject, nevertheless, to such restraints as the Government may prescribe for the general good of the whole."

Indians who become citizens of the United States are entitled to receive from the government of the State in which they reside full protection in those fundamental privileges and immunities "which belong of right to the citizens of all free governments and which have at all times been enjoyed by citizens of the several States." These fundamental principles and immunities are civil in their character and may be further defined as those which are granted to him by his Creator and for the protection and restriction of which governments and courts are established. Besides these there are other privileges and immunities enjoyed by certain classes of citizens of the several States which the Indians possessing the proper qualifications will be entitled to claim and enjoy as citizens thereof. These are artificial, such as may be granted by the body politic and may be termed political liberties. They embrace the rights to participate in the government of the State, to vote, to hold office, and such other privileges and immunities of a like character as may be granted by the State to its citizens. In compensation for his protection by the State in all these privileges and immunities, or such as he may be qualified to exercise,

the Indian as a citizen will owe allegiance to the government of the State, but it must be constantly borne in mind, as was well stated by the Supreme Court of the United States, (241, p. 591), that "when the Indians are prepared to exercise the privileges and bear the burden of one sui juris the tribal relation may be dissolved and the natural guardianship brought to an end, but it rests with Congress to determine when and how this shall be done and whether the emancipation shall at first be complete or only partial. Citizenship is not incompatible with tribal existence or continued guardianship, and so may be conferred without completely emancipating the Indians or placing them beyond the reach of congressional regulations adopted for their protection." When, however, an Indian has been given a fee simple patent for all of his lands, both original and inherited, and all individual and tribal funds of whatsoever nature turned over to him, that particular Indian will have become a full fledged citizen of the United States in the full sense of all that term implies. He will no longer be subject in any respect to supervision by the Government, but will have the same right as any other citizen. His contracts will not be subject to governmental approval, but will stand on an equal footing with those of other citizens. There will be no restriction as to trade with him, and in fact whatever rights may be enjoyed by citizens of the United States will be his and he will no longer be subject to arrest at the instance of a United States superintendent or by the Indian police, nor to trial and punishment by the courts of Indian offenses for misdemeanors over which those courts now have jurisdiction.

WAR AS A CIVILIZER.

Certainly not all wars have advanced civilization, but many of them have changed the course of events to that end. War is a civilizer if it is the only means of preserving liberty and justice. War is a civilizer if from the blood and ashes of its battles flower the blessings of truth and enlightenment, although the fruit may be centuries in ripening.

We are not wont to check up to-day's doings with the calendar of long ago to note that the original Frenchmen at the Battle of Tours probably saved us from the law of the Koran, or that except for Marathon we might now be under the rule of a Persian satrap. Much surer are we that the advent of representative democracy was in the victory of the Colonial arms at Saratoga, and that out of our Civil War came a new South of marvelous progress.

What of America's last great war adventure?

Our soldiers are returning from the world's deadliest battle fields. They who went away as boys, come back as full-grown men. The other day I stood for an hour to see a brigade of these bronzed cru-

saders go by. Their superbly trained movements were almost involuntary. They seemed unconscious of their full accoutrements and trappings, their wound and service stripes, and honor badges. The cheers of the throng glanced from their steel helmets, and apparently they did not know that they were a spectacle to thrill the gods.

It was their last review; the transition of soldier to civilian, and in this matchless realism I saw the picture of America passing by—America, erect, dauntless, helmeted in the victory of her righteous cause, going forth responsive to the beckoning years. I saw the order, the precision, the discipline of her democracy, and the passing ranks sounded the irresistible march of her civilization in the measured step of men who had trampled autocracy in the dust.

In that triumphal scene were descendants of men who were Americans before "Attila's fierce huns" were beaten at Chalons, perhaps before the Siege of Troy. There is something in this fact that will hold a page in history to the latest generation. Its meaning will unfold as the years pass, but even now it may be said that probably nothing more helpful has come to this ancient Indian race than the enrollment of 10,000 of its sons simply as American soldiers to challenge the barbarous rule of central Europe.

The immediate benefit comes from the equal opportunity they had with white comrades for gaining knowledge, for maturing judgment, for developing courage through contact with events and conditions that trained and toughened character in the defense of a just cause and a great ideal. No education serves a man better than this in any circumstances. It puts into him the ability to "go over the top" anywhere. The great lesson mastered by American soldiers, as their achievements clearly show, was to get things done. They are not likely to forget how. No Hindenburg line across the field of civil progress can stand against such fellows. They are destined for to-morrow's leadership. The wondrously multiplied interests of trade, industry, education, the professions, statesmanship, await them. The same sort of splendid initiative and self-reliance should find expression in action wherever the Indian soldier returns to his people. There are already assurances of this. Encouraging reports have come from superintendencies showing the Indian's war acquisitions, many of them indicating that he has discovered his educational needs and the equipment he must have to be successful, which is a most hopeful sign.

The following from some of the reports will show the general trend of all.

The Superintendent of the Five Civilized Tribes writes:

I am convinced that the Indians in the military service, especially the full-bloods, have received inestimable benefit from their association with white comrades and the training to which they have been subjected. Only a few days ago a special officer

connected with this superintendency advised me of having met a number of full-blood Cherokees lately returned from the army, none of whom could speak a word of English on their entering the service, who now talk English fluently. He stated that old acquaintances of these young men were amazed at the transformation they had undergone.

The superintendent of a large nonreservation school in South Dakota says:

Of the 57 boys who enlisted from the school, about half of them have returned. There are a number of them who have again taken up their studies. They all feel that the experience has been a wonderful advantage to them; they also feel that they are in need of further education. A number of them visited here after being discharged and intend to return to take up their work next fall. One boy in conversation regarding school work stated that he found when placed in contact with white young men that his education was very limited and that he needed to go to school several years and that he intended to return in the fall. Another boy who is in school stated that he found that a man could not get anywhere, even in the Army, unless he knew something and for that reason intended to complete his work here at the school.

This from an Indian school superintendent in northern California:

In every case that I have encountered where an Indian has returned to his jurisdiction I have found that the Indian young man was greatly bettered through his work in the Army, both physically and mentally. I do not know of a single case where it has not benefited the Indian to such a degree that it is plainly noticeable and commented upon by the whites of his community. I was over at an Indian's home just the other day who had returned from active service in the trenches of France. This Indian, Phillip Jim, had the remarkable record of going over the top more than 30 times. He walked into the recruiting office at Quincy on his way home and laid down \$100 for a Victory bond, saying that he was done fighting, now he could help some other way. This Indian went straight home to farm, and started hard work of putting in a garden, repairing his fences, buildings, etc., that had gotten in bad condition since he left, for his father was afflicted with an incurable disease and his mother was ill. He says that he knows much more than he did and that he wants to do more now than he ever did.

From a Minnesota superintendent:

I believe that the realization that millions of others have been under discipline, and that discipline and order are necessary to the proper conduct of any work will be of much benefit to the Indian boys. I believe, too, that the necessity for being on the job day in and day out, with no chance to quit just as soon as something goes a little wrong, will help them greatly when the Indian boys come back and go to work again. The steady grind of daily work, with its touch of monotony, has always been distasteful to the Indians, it has seemed to me, and I believe that the service in the Army in common with so many others will show them that it is only by "sticking to it" that they can succeed.

Another Minnesota superintendent says:

There seems to be a more general willingness among the young men who have returned to engage in useful occupation which affords them an opportunity to earn support, and it is believed that the contact with life foreign to reservation conditions has resulted in fostering generally advanced ideas. Several of the young men are planning to resume their school work on account of the need of an education that has been impressed upon them anew.

From an Arizona superintendency:

Five of these soldier boys returned to the reservation recently from their work in France and they come with a broader outlook on life than when they went away and with a desire to do something creditable to themselves and to their people.

From an Oklahoma reservation:

One Cheyenne, typical, no account, reservation Indian with long hair went to France, was wounded, gassed, and shell shocked. Was returned, honorably discharged. He reported to the agency office square shouldered, level eyed, courteous, self-reliant, and talked intelligently. A wonderful transformation, and caused by contact with the outside world. He is at work.

A Washington superintendent referring to the enrolled Indians of his reservation who have returned to civil life says:

In every case which has come to my attention there is a distinct improvement in the general demeanor of the soldier, and his experience while in the service is of unquestionable benefit to him.

From southern California a superintendent reports:

Those who have returned to the reservation up to the present time show amazing progress in many ways; self-reliance, industry, personal habits, and proper respect for authority.

From a large reservation in North Dakota the superintendent in an interesting letter of some length says:

I know of no greater benefit or education derived by these Indians than by their enlistment in our recent war. Upon notice of draft or that volunteers would be accepted, practically all of our young Indians took the matter up with enthusiasm, and although by right of their being trust patent Indians they could have pleaded exemption under rulings of the Army board, I do not know of any case in which an Indian was exempted for noncitizenship. They showed a most laudable interest in their country by endeavoring in every way to assist by enlistment or by charitable contributions. The refusal by your office to permit segregation of Indian troops or volunteers, or draftees, was one from which the greatest benefit could be derived, as I find by personal investigation that they were in practically all cases the sole Indian in a company and therefore compelled to take up in every way the life and manners of the white man. They have not only returned disciplined, but have taken up the better part of the white man's life as it is brought out by discipline in the Army. I notice upon the return of these boys that they are more alert and take more interest in local affairs, and I do not believe that we will have difficulty with Indians of this class. I safely say that our returned soldiers now constitute the best type of young Indian manhood.

The superintendent of a large western school from which many young men entered both the Army and Navy strongly epitomizes the results of the Indian's war experiences as follows:

He has lost much of his timidity.

He has greater self-confidence.

He is more courteous and more polite.

He has been made to feel that he is as capable of fulfilling his obligations to his country as any other race of people.

He understands more fully his patriotic duty to his country.

He realizes more than ever that there is a place for him in the community; that he is a unit in the great Commonwealth.

He has seen and learned many things of educational value, and delights in telling of his experiences whether in the Army camps, or the Navy, at home, or abroad.

He has improved very perceptibly in the use of English.

His contact with the outside world and his associations with disciplined men has meant for him much mental discipline. As a result of such discipline he returns to school a better and more desirable student, and to his home a better citizen.

The "Welcome home" which the Indians give their young men returning from military service is usually of the most cordial and commending character. Occasionally they feel that by reviving the native costume and some form of old war-time dances they can best express complete approval of those who enlisted under the banner of American freedom. But nothing more noteworthy, perhaps, has transpired than the funeral of a young man from the Rosebud Reservation, S. Dak., who died of influenza at Camp Dodge, Iowa, and whose body was returned home for burial. The obsequies were arranged by the Indians according to their own ideas and as an expression of their deepest emotions. The official reporting the incident says:

The boy's father's home is situated on a very high hill, so that for a long time before we reached it we could see the great crowd of Indians who had gathered to pay their last tribute. Long before we reached the home we could also see Old Glory floating from a tall flagpole that had been set up since the news of his death had reached the reservation. Each of the five young men who were pallbearers had qualified for military service, though some had been rejected on account of physical unfitness and others had not yet been examined. Each one of them, however, had pinned to the lapel of his coat streamers of red, white, and blue, and they rode on swift Indian ponies behind the automobile which carried the body of the young soldier. Over this car floated a very large flag. In front of the procession rode another young Indian brave carrying Old Glory also. It was so impressive in its complete demonstration of loyalty that one could not keep back the tears.

DISTINGUISHED SERVICE.—I mentioned courage as the soldierly quality that would win civil triumphs; of course something more than physical prowess and with no taint of mere bravado, but moral courage inspired by a greatness of purpose and lifted to the plane of high service and valiant sacrifice. It is such heroism that holds the current affairs of a people to the standards of rectitude and puts security into the days of peace. I can not think that this kind of heroism was lacking in the brilliant achievements that won personal distinction for so many of our soldiers, and am proud to know that the Indians, who were numerically as well represented as any people of the allied powers, were proportionately their equal in the record of individual valor.

As a rule the Indian bears his honors very modestly and his reluctance to any display has somewhat hindered definite information in many cases. I shall, however, give a few instances as of representative significance:

It is reported that Francis Lequier, a young Chippewa, in company with two or three others, attacked a machine-gun nest, and when left as the only survivor, faced all that remained of the machine gunners and killed or captured the entire group. He was said to be recovering from 11 wounds received in action.

James M. Elson (deceased), of the Tulalip Reservation, was cited by his commanding officer for guiding sentry squads to an isolated post in no man's land, and for guiding patrol to outskirts of Brioules, securing information of enemy occupation, and showing exceptional skill, courage, and coolness under fire.

The superior officer of Richard Bland Breeding, a young Creek of Oklahoma, said of him: "He was the most capable, daring, and fearless platoon leader in the division."

Among those who won the *croix de guerre* was volunteer John Harper, a full-blood Uncompahgre Ute, of which details are lacking at this time; Chester Armstrong Fourbear, a full-blood Sioux of South Dakota, cited for bravery in swift running as a messenger at Bellicourt; Ordnance Sergt. James M. Gordon, of Wisconsin, cited for rescuing while under shell fire a second lieutenant of the French Army who was wounded while on an inspection tour; Nicholas E. Brown, a full-blood Choctaw, who when killed was a corporal in the 142d Infantry composed largely of Oklahoma Indians, the honor being posthumously awarded; Marty Beaver, a full-blood Creek, on the military records as Bob Carr, an orphan boy who enlisted in Company F, 142d Infantry, Thirty-sixth Division, details at present lacking.

Alfred G. Bailey, a Cherokee of Oklahoma, had been in regular service with Gen. Pershing in Mexico. He was a sergeant when killed in action in France and was awarded the distinguished service cross for creeping into the enemy's lines alone far in advance of his regiment where, unaided, he killed two German machine gunners and captured a third together with his gun.

Walter G. Sevalia, of Brule, Wis., a corporal in Company F, Seventh Engineers, was cited for "extraordinary heroism" in action near Breuille, France, in November, 1918. He swam the Meuse under terrific fire with a cable for a pontoon bridge, and later carried another cable over the Est Canal and across an open field covered by enemy machine guns. At this time he was wounded but returned bearing a message of great importance.

Sergt. O. W. Leader, a three-fourths blood Choctaw, was foreman of a cattle ranch in Oklahoma when we entered the war. Greatly to his chagrin an idle rumor gained currency that he was a Hun spy. He quit the cattle business at once and enlisted as proof of his American loyalty. He was cited for bravery in battle in the course of a

brilliant record of which the following is a synopsis: Fought at Cantigny, May 28, 1918; fought at Soissons, Chateau-Thierry, July 18, 1918; fought in St. Mihiel salient, September 12, 1918; fought at Argonne Forest, October 1, 1918. Twice wounded and twice gassed. In addition to this military record is the interesting fact that Sergt. Leader was selected by the French Government as the model original American soldier of whom an oil painting should be made to hang upon the walls of the French Federal building where will be displayed types of all the allied races.

Probably no more brilliant instance is recorded than that furnished by Pvt. Joseph Oklahombi, a full-blood Choctaw, of Company D, 141st Infantry, whose home is at Bismarck, Okla., and who received the *croix de guerre* under the order of Marshal Petain, commander in chief of the French Armies of the east. A translation of the order follows:

Under a violent barrage, dashed to the attack of an enemy position, covering about 210 yards through barbed-wire entanglements. He rushed on machine-gun nests, capturing 171 prisoners. He stormed a strongly held position containing more than 50 machine guns, and a number of trench mortars. Turned the captured guns on the enemy, and held the position for four days, in spite of a constant barrage of large projectiles and of gas shells. Crossed no man's land many times to get information concerning the enemy, and to assist his wounded comrades.

Such deeds of highest service to unborn generations are a part of the glorious conclusion wrought by American arms and will outlive all memorial bronze and marble, for they will inspire the song and story of immortal tradition, and though recorded history may fail, these things that have been written into the psychology of human freedom and justice will endure.

THRIFT.—It has long seemed to me that no single benefit from the war would be of greater value on the practical side of our civilization than the impulse acquired toward thrift, and I have desired to turn this opportunity to the advantage of the Indians as far as possible. Incident to the patriotic urge back of all our bond sales and of almost equal weight was the investment feature.

The Indians' part in the purchase of Liberty Bonds was a definite training in the direction of a safe and wise use of money. Their application for bonds of the fifth, or Victory, loan, to the extent of nearly \$4,000,000, brought their total subscriptions to approximately \$25,000,000, or a per capita sum of about \$75 for the whole population.

I have felt that the time and circumstances were opportune for continuing to stress along with industry the lessons of economy and careful management. The Indian, and for that matter every other man, needs few things more than honorable productive occupation of some kind and a disposition to conserve his income, to spend less than he earns. To work and save will go far toward relieving the

economic distress of which some people always, and most people sometimes, complain. The remarkable progress made by many of the Indians in handling their possessions so as to make definite gains each year, not only as to material and industrial conditions, but in the elevation of home life which nearly always follows, is evidence of a thrifty spirit which should be awakened and extended as widely as possible because of the truth as old as human nature that the man in a community who does well and gets ahead arouses emulation and becomes an educational example of practical value.

It seemed to me most desirable to make use of the further sale of War Savings Stamps as an opportunity for spreading the gospel of thrift among the Indians in the hope of forming, especially among the young, the beginnings of provident and progressive habits that will bring to them, besides personal success, the right sort of influence upon others. The circular appearing below was, therefore, sent to the field service and portions of it widely distributed among the Indians. The reports received seem fully to have justified this campaign, and although the year has been one in which the increased cost of nearly every necessary of life has greatly reduced the normal savings of all earning classes, returns indicate that the Indians have continued the purchase of War Savings Stamps until their total investments therein now exceed \$1,000,000.

INDIAN SERVICE THRIFT CAMPAIGN, 1919.

To superintendents:

"For age and want save while you may,
No morning sun lasts the whole day."—*Franklin.*

I wish to urge very special cooperation throughout the Indian Service this year with the Government's plan of continuing the sale of War Savings Stamps. I know of no way that we can better serve our country and ourselves, now that the call to arms is ended. There are great reconstructive expenses that no patriot would evade. No greater privilege ever came to the rank and file of our people than these investments of small savings on the easy terms provided. They should teach us the individual thrift we have long needed. They should create among the masses of our many millions the habits of forethought that would fashion us into a traditionally provident people. The opportunities coming to an uncrowded population amidst incomparable gifts of nature have saved us thus far from the dangers of lavish living. But there must come a revision of past standards of personal economy. We shall have to know more about saving. We can not afford to have students of foreign conditions saying that the average French peasant would amass a fortune out of the back-door waste of the average American family. If we get nothing from this war but the saving habit, it will be worth more than the billions expended.

"If you would know the value of money, go and try to borrow some."—*Franklin.*

But the thing I now urge upon every Indian Service employee is to bring home to the Indians, especially the young and middle aged, the immediate and lasting benefit of savings made with a right purpose. This practice must have a worthy aim as its economic virtue, and when boys and girls are thus properly started their little income

investments commit them concretely to that aim and by repetition develop the elements of manly and womanly character. Our lives on this earth are inseparable from material things. The way we handle and the use we make of physical or tangible property enters largely into the fabric of industrial and social well-being and gives stability to civilization. Our young Indians should get the meaning and worth of this truth. They should be aided to see the importance of money as a measure of values, as a means to high attainments and to personal independence. I have found no better barometer of a boy's successful future than his disposition to save his earnings rather than to spend them foolishly. The ambition to accumulate leads, through the feeling of personal ownership, to thoughtful judgment, good conduct, and habits of safe economy. Contentment with mere well-doing is destructive of energy and frequently invites dissipation. A growing ownership of property strengthens the boy, dignifies the man, and awakens like purposes in others. The fact that a man more than exists, that he owns a home and has a share in the material welfare of his community, intensifies his interest in public affairs, increases his feeling of responsibility, magnifies his concern not only for his own fireside but for his country and his countrymen.

"Without industry and frugality nothing will do and with them everything."—*Franklin.*

I feel most earnestly that our new policy to hasten the competency of the Indian for the management of his own affairs correlates intimately with the Thrift Stamp movement, and I desire an active and constant endeavor to convince the Indians that whatever may be their choice, the day is coming as rapidly as we can bring it when their relation as dependents and wards of the Government will cease, and that they can make no better preparation for that time and do themselves no greater credit or honor than to begin now a faithful and rigid saving system, such as the purchase of these stamps affords. I should like the Indian atmosphere to be surcharged with the idea that they must eventually, and not remotely, stand on their own feet, make their own way, pay taxes, and feed, clothe, and educate themselves the same as the white man. To this end, there should be no failure to furnish the simple lessons of all experience that to provide for the future is the essential law of intelligent life; that when times are good and conditions favorable provision must be made for misfortune or sickness or bad times; that in fruitful days a store must be laid by against possible adversity and want. We should see that the Indian gets the true meaning of thrift; that it is not a saving of money alone and for itself; that it does not foster avarice or greed, but means the wise use instead of the abuse of money; that thrift of the right sort tries to make the most and best of labor and its product; that it is the spirit of order, attention to details, and carefulness in all our daily affairs; and that industrious earning and saving becomes the best source of all capital which provides opportunity and prosperity to the rapidly increasing number of wage workers.

"He that hath a trade hath an estate, and he that hath a calling hath an office of profit and honor."—*Franklin.*

It seems especially appropriate that the 1919 Savings Stamp shows the picture of Benjamin Franklin, who is so generally known as our country's most distinguished apostle of thrift in its best sense; who learned a trade and supported himself by it; who was a saver of time and knowledge and all that builds up true manliness; who worked for character as much as wages and whose breadth of thrift earned him prosperity, the confidence of men, public recognition, and statesmanship within and beyond his own nation. I feel that our work among the Indians and particularly in all the schools may now be turned to a very practical advantage by the example of this great man who loaned from his private funds to the Government in its days of early stress; who taught us that there are no better tests of common sense and sound judgment than the making, saving, and spending of money; that to make money

honestly and industriously, to save it without being sordid, and to spend it without waste or extravagance are fundamental in character building and will bring to any young man or woman a useful education of great value.

I ask you, therefore, to push the sale of these stamps vigorously as an educational and economic matter no less than a patriotic one, and to do everything practicable to get Indians, young and old, in the way of earning money and saving some part of it for thrift investment, and that you discourage cashing such stamps prior to maturity, except in the case of extreme need.

Herewith are inclosed instructions as to the method of accounting for stamp purchases, the funds that may be used therefor, and the reports you will be expected to make to this office.

Sincerely yours,

CATO SELLS, *Commissioner.*

EDUCATION.

Last year I presented at some length certain basic principles involved in educating the Indian, mentioning the purposes of the tentative course of study, and giving an outline of the methods adopted and believed to be especially applicable to the education of the Indian pupils.

Under this theory and system of education the Indian schools, although not always fulfilling the ideals of our curriculum, have maintained their usual standards remarkably well against unavoidable odds that prevailed during the closing months of the war and have continued since the armistice in a steadily increasing cost of supplies and operation that made economy a paramount necessity.

It may not be widely understood that the Government Indian boarding school, in many respects, is in a class by itself. It provides for those in attendance lodging, subsistence, clothing, medical attention, and transportation, as well as academic and industrial instruction. For the last fiscal year the law permitted an expenditure of \$200 per pupil, except that where the attendance was less than 100, a per capita expense of \$225 was provided for. Formerly the maximum expense authorized was even less, though perhaps not more restrictive of good results, if the wide difference in the cost of all supplies be considered. Discerning observers have commented in terms of surprise that an Indian boarding school can accomplish work of the scope outlined within the cost limit stated above, for it is generally known that industrial schools for other than Indian students expend approximately twice as much, or more, per pupil; and this will hold true with reference to the more liberal provision fortunately made for the coming year, which allows \$225 per capita for Indian schools having an attendance of 200 or more, and \$250 per pupil for the schools of less than 200. Thus, whatever deficiencies appear in Indian education, or whatever failure to accomplish the fullest results, must be charged rather to insufficient provision of moneys than to other causes. An instance of adverse conditions is exemplified in the vast amount of daily routine work which must be done in an Indian school

of whatever size or capacity. It has not always been possible to employ sufficient labor to perform this institutional work, much of which is without value as instruction, but it has been done by Indian pupils who have thus given more of their time to it than is consistent with the best educational results. Of course, much of the work is of value to them for training and experience when properly correlated with systematic class instruction. This is true in connection with the shops, repair work about the plant, the labor devoted to agricultural activities, and for those duties of the girls which concern cooking, sewing, or housekeeping.

Notwithstanding the limitations mentioned, I am expecting for the coming year a more stable and effective organization in our instruction service, and a resumption of conditions that will place the schools upon a more workable basis, and I have lately brought to the attention of all superintendents and school workers matters of special importance with a view of strengthening educational activities.

A RADICAL DEPARTURE AS TO ENROLLMENT.—The work which the Indian Bureau has undertaken during the past half century toward the civilization and education of the various Indian tribes has brought encouraging results, especially within recent years. There has been a rapidly increasing number of those who speak and use the English language, who have adopted citizen's apparel, are in customary daily intercourse with their white neighbors, and are breaking away from tribal ties. An admixture of blood has occurred to such an extent that many Indians are hardly distinguishable from whites, and there has been in the Government schools too many of this class who properly belong to State public schools, although their number has of late been materially diminished. Again, the public school of the State is the place for the children of those Indians who have been released from guardianship. The combined capacity of Government schools is not sufficient for all and the real Indian should be given the preference as to educational opportunity.

In order to eliminate those toward whom the Government's duty has been fulfilled and who with the assistance of the States should now depend upon their own resources, and to reserve the privileges of the Indian Schools for children of a greater degree of Indian blood who are still wards and without advantages, I have believed it wise and expedient to prescribe certain amendments to the Indian school rules.

These amendments define the classes which should be eliminated from Government schools. Although they bear date of July 29, and of course concern the future more than the past, they are given in full as follows:

JULY 29, 1919.

To all superintendents:

The rules for the Indian school service, approved July 14, 1913, are hereby amended by adding thereto, following paragraph 9, page 4, the following provisions:

"9a. There shall not be enrolled in Government nonreservation schools any Indian children who are not under Federal supervision, without prior authority from the Commissioner of Indian Affairs.

"9b. There shall not be enrolled in any Indian reservation boarding or day schools any Indian children not under Federal supervision, except such as are entitled to share in the benefits of treaty or trust funds from which the school is maintained without prior authority from the Commissioner of Indian Affairs.

"9c. Except as to reservation schools supported from tribal funds or under specific treaty stipulations, Indian pupils who have ample financial resources or whose parents have such resources sufficient for the payment of all or part of the expenses of the pupils' education, whether or not the parents are wards of the Government, shall be required to pay their transportation, and all or part of the actual cost of their support and education, not to exceed \$200 a year, or at the rate of \$20 a month or a fraction of a year. Superintendents will enforce this regulation.

"9d. All pupils above the sixth grade entering a vocational school shall be enrolled for four years or for a sufficient term to complete the vocational course provided by the school.

"9e. Pupils thus enrolled for the vocational course shall be permitted to return home for vacation once only during such term of enrollment, at their own expense ordinarily unless in exceptional cases the superintendent finds it just or advisable to pay their transportation; otherwise the pupils shall remain at the school during the vacation months, or, if allowed to depart, shall pay a charge of \$25 per month for each month's absence, unless in especially meritorious cases the superintendent shall grant not to exceed 30 days leave."

The scope and purpose of the amendments were explained in a letter of instructions accompanying the same, which appears below:

JULY 29, 1919.

To all superintendents:

The accompanying amendments to the school rules restricting enrollment of pupils to those who are under Federal supervision demand more than passing notice. For several years attempts have been made to eliminate from the Indian schools pupils whose parents are citizens, particularly those possessing only a small degree of Indian blood. Notwithstanding past efforts in this respect, there are still enrolled in many of our Indian schools a large number of near-whites. In many cases, these pupils live in towns or in communities where there are at least average public school facilities. The justification usually given for the enrollment of such pupils in Government Indian schools is that they wish to have the benefit of the vocational training offered or that the parents are poor and in need of assistance. Superintendents frequently accepted such explanation as satisfactory, provided the applicant possessed as much as one-fourth Indian blood. Superintendents of nonreservation schools contend that they must rely on the statements made by the reservation superintendent as to eligibility of the pupil, but sometimes pupils are first enrolled and the justification for their enrollment supplied at a later date. This is particularly true as respects the enrollment of pupils who are not living under the jurisdiction of a superintendent or agency. Greater care must be exercised in this matter in the future than has been practiced in the past.

In order to carry out the requirements of these rules, there must be the closest co-operation between the superintendents of reservations and superintendents of non-reservation schools. Reservation superintendents should not approve applications

of pupils unless they have definite information regarding them and have satisfied themselves that without Government assistance the pupil would be deprived of school privileges. It is not a sufficient justification that a child would be better off in a Government school or that it would be desirable for such child to have vocational training, but the question should be "Does such Indian boy or girl have the same school privileges in the community in which he or she lives that other children enjoy?" If they do there can be no real justification for the enrollment of such boy or girl in a Government school, except possibly in rare instances where other factors enter which might justify waiving the rules. Furthermore, where the Indian children are entitled under State law to attend its public schools, it should be first ascertained whether there are good and sufficient reasons for their not so attending, before they are received in a Government school.

In all such cases the applications should be first forwarded to my office, accompanied by a full statement of the facts, and the applicant should not be admitted to the school until the approved application has been returned to you. It may be necessary to make exception for full bloods or in case of some special classes of Indians who are technically nonwards and citizens, but who are, nevertheless, practically under governmental supervision, as, for instance, the Eastern Cherokees of North Carolina, or the Choctaws of Mississippi.

The children of Indians who have received their patents in fee to their allotments are to be excluded from enrollment in a Government school supported from gratuity appropriations unless in a given case the Indian child should be a Federal ward, irrespective of the status of the parents. You are directed to accept hereafter no Indian pupil of the classes indicated, and to take steps to eliminate such pupils from your present enrollment at the end of the school year or at the end of the definite term of enrollment of each such pupil. If doubt exists as to the status of any pupil or any applicant, such case accompanied by all attendant facts and information must be presented to me for a decision. Responsibility for elimination from the schools of nonward citizen Indian children rests upon the superintendent. Inspection officials are hereby instructed to make, at each school they visit, careful investigation of the eligibility of the pupils enrolled and report to me all violations of the school rules and of these instructions. Superintendents who negligently permit or approve the enrollment of ineligible pupils in Government Indian schools will be held personally responsible. It follows, therefore, that the utmost care must hereafter be exercised, both by the reservation superintendent and by the nonreservation superintendent, in order effectively to enforce these rules.

Frequently pupils in the prevocational grades have been transferred at Government expense to schools located at great distances from their homes when the only justification for such transfer was the wish of the pupil or parent, or the desire of an employee to take a trip as escort at Government expense. This practice must be discontinued. No pupil will hereafter be transferred to a distant school or accepted for enrollment in a nonreservation school until he has completed the highest grade in the reservation school, except in cases where the reservation school is overcrowded, and then as a rule such pupil should be sent to the nonreservation school nearest his home. Specific authority must be obtained for any deviation from this rule and only in very special cases will authority be granted to pay transportation of pupils in the prevocational grades to other than nonreservation schools nearest their homes.

I wish to again impress upon superintendents, and particularly upon reservation superintendents, the importance of giving special attention to the matter of requiring Indians who are financially able to do so to contribute more toward defraying the expenses of the education of their children. Where parents or pupils have sufficient incomes of their own, they must hereafter be required to bear all or a part of the cost of their education. More and more Indians must be taught and required to rely on their own resources and to depend less and less upon the Government.

The purpose of this circular and the amendments herewith should be made generally known both to pupils in schools and to their parents and guardians. I regard this as an important matter and in direct line with the declaration of policy, promulgated April 17, 1917.

In this connection I will further invite your attention to sections 246 and 247 of existing school rules. These requirements as to attendance of Indian children in public schools must be complied with in all cases where Indian children have reasonable access thereto and where such children may be received without valid objection from the public-school authorities, whether or not upon payment of tuition. As to Indian children not under Federal supervision, you should exercise your influence and give your assistance whenever opportunity affords toward the reception of such children by the State public schools.

An acknowledgment of this circular and the amendments should be made at this time, but I wish a full report on or before October 30, advising me just what steps you have taken, are taking, and the effect of these new rules on the enrollment of pupils in your school, as well as the results secured in getting parents and pupils to contribute toward the expense of the pupils' education and support.

CATO SELLS, *Commissioner*.

Shortly following the announcement of the amended rules as above given, the Washington (D. C.) Post made editorial comment as follows:

A PROGRESSIVE POLICY.

The progressive policy adopted by the Interior Department with respect to the Indians has been further emphasized by orders recently issued by Cato Sells, Commissioner of Indian Affairs, and calculated to place the Indians upon a plane of independence and self-reliance. It is proposed to remove all restrictions upon all lands owned by or allotted to members of the Five Civilized Tribes of Oklahoma of one-half Indian blood, and the Commissioner of Indian Affairs has ordered that a complete list of all members of those tribes 21 years of age or over be compiled. While the Government will exercise a careful watch over these people, yet they are to have charge of their own lands with a greater degree of freedom than ever before.

Amendments also have been made to the rules governing the Indian school service for the purpose of preserving these institutions for the sole benefit of the Indian children who are under Federal control and of debarring children whose parents are fully able to provide for their education. At nonreservation schools no Indian children are to be enrolled who are not under Federal supervision, and at Indian reservation boarding or day schools no children shall be enrolled who are not entitled to share in the benefits of treaty or trust funds from which the school is maintained. Where pupils or their parents have ample resources they must pay transportation of children sent to school and must pay \$200 a year tuition and board.

The reasons for these amendments to the rules are obvious. Schools supported from tribal funds are for the benefit of children of those tribes, and should not be used by others. Schools maintained at Government expense are for Indian children who have not the privilege of public schools and whose parents are not financially able to pay for their education. There is no reason why an Indian who possesses valuable lands, possibly yielding him a handsome income, or who enjoys an income from other sources should have his children educated in vocational training at Government expense, with the Government even paying the child's railroad fare to and from school.

Commissioner Sells, whose administration of the Indian Bureau has been highly successful, has in these matters given further evidence of his ability to fairly and justly look after the Nation's wards.

ENROLLMENT IN PUBLIC SCHOOLS.—For the past three or four years, the wisdom of encouraging attendance of Indian children in State public schools by payment of tuition for them has been strongly emphasized and Congress has made specific appropriations for such purpose. There has been a steady increase in the number of children accepted by the public schools and in the number of contracts made for the payment of tuition. There seems to have been no prejudice against the Indian as such by the white members of the school district in most localities, and such feeling as has existed against this coeducation of the Indians with the whites is rapidly disappearing.

It is my intention to push actively the policy of reserving the Indian schools for children who are not provided with adequate free school facilities and to pay tuition for those who have access to public schools but whose parents are wards of the Government. Underlying this purpose is the firm conviction that the great common school system of our country so wisely planned in colonial times is of vital value to our free institutions and should establish the elementary principles of our citizenship. The statistics essential to military conscription startlingly revealed the need of greater mass enlightenment and the special need of a uniform language. More potent than any other constructive force in our civilization is, or should be, the free public schools as a nursery of one American speech and of the simpler but fundamental lessons of civic virtue, social purity, and moral integrity. The hope of our Democracy, now set up as a model for the world, lies in the successful teaching of these things to all classes and races of our polyglot population by a system of instruction such as the State public schools make possible. I hold, therefore, that the Indian child can have no better fortune than to enter these schools and become a learner of the knowledge and an absorber of the influences that tend to make us a unified people in all great purposes and ideals. Moreover, an important benefit to Indian children in the public schools will be the operation of compulsory attendance laws which with a single exception prevail in some form in all of the States. As a rule the Indian child will not fall behind the progress of the white pupil under regulations affecting both alike, but the parent of the former is apt to be too lenient in requiring regular attendance at school. Practically all States of the Indian country have compulsory laws covering the full school year which are, of course, applicable to citizen Indians, and I should strongly favor such legislation as would extend their control over children who are wards enrolled in public schools.

CLOSING OF CERTAIN BOARDING SCHOOLS.—In carrying out the policies which have heretofore been indicated and which are in part embodied in the amendments to the school rules previously explained, it has been found advisable to discontinue certain boarding schools

and to use the funds to better advantage elsewhere. In Wisconsin, the Oneida Indians have reached a stage of advancement which seemed to justify the withdrawal of Federal school privileges and therefore the Oneida boarding school has been closed. Public schools will in the future provide largely for the children and it may be anticipated that additional public school districts will be organized. At Sisseton, S. Dak., public schools are numerous and easily accessible to these children. The community has become settled and developed and the boarding school there, being no longer necessary, was discontinued within the year.

For substantially the same reasons the Nevada boarding school, Nevada, and the Umatilla boarding school, Oregon, have been abandoned. A day school will be conducted at the Nevada School plant for those children of the immediate neighborhood, and at Umatilla two day schools have been provided for those who cannot attend the public schools. The Martin Kenel School at Standing Rock, N. Dak., has been discontinued because it was expensive to operate, the plant was not in good condition, and all of the pupils could be accommodated at the Standing Rock Agency boarding schools.

Under the amended school rules the end of the fiscal year virtually marked the close of the Yankton boarding school, South Dakota, and in Oklahoma of the Ponca, the Otoe, and the Shawnee boarding schools, the conditions as to citizenship and the accessibility of public schools being such as reasonably to justify this action.

It should be said that in all the jurisdictions where schools are thus discontinued special attention will be given to any exceptional cases and their enrollment in other Government schools effected; also Indian students of some degree of achievement who are ambitious for further advancement will be considered for admission to nonreservation schools.

These educational readjustments are in line with the settled policy of securing public school instruction for the Indian children whenever practicable, of requiring citizen and other Indians of sufficient resources to share in the cost of education, and of extending needed school facilities to those less fortunately situated. In the far Southwest are still many Indian children for whom no schooling is provided and among them are many of the poorer classes. The claims of these are most urgent and public funds which can be released with no injustice elsewhere should be used as far as applicable to discharge the Government's obligations to the many who are still its wards and are as helpless as they are deserving.

CONSTRUCTION.—The abnormally high cost of labor and material necessarily impeded construction work in the service during the past fiscal year, and considerably reduced the volume of both open market and contract projects, but few awards being made for the latter,

as the bids submitted for them were almost invariably much in excess of the funds appropriated or apportioned. As a return of the cost of labor and material to the prewar status, or even close to it, can hardly be expected in the near future, it is the intention to carry on the construction projects as far as possible in the open market, for the results obtained by that method during the past year have been satisfactory. A practical and important demonstration of this appears in the construction of the Ute Mountain boarding school, Colorado, consisting of 10 buildings, with a central power, heating and electric lighting plant, and water and sewer system. It is expected to complete the school within the year at a saving of 40 per cent over contract work.

THE FIELD PERSONNEL.—I have previously reported the serious loss to the field force of this bureau by transfer to direct or associated war work. The epidemic of last fall further disturbed the regularity of the service, so that it became extremely difficult to maintain throughout the year well organized conditions, and inexperienced, temporary help became a necessity in many jurisdictions. However the results under this unavoidable handicap have been generally all that could be expected. I have had frequent occasion to appreciate the loyalty of very many employees whose qualifications and efficiency were attracted to other more remunerative employment, but who remained at their posts and even assumed other responsibilities in the genuinely patriotic spirit demanded by the period of extreme emergency. I am impressed that as a class the Indian Service employees are not adequately paid when qualifications and the character of the work performed are compared with other Government and outside employees. I should be glad to go further than available appropriations permit in rewarding the faithful and often self-sacrificing service of my coworkers.

INDIAN FAIRS.—One of the most helpful means of stimulating the agricultural enthusiasm of the Indians has been the Indian fair held each year on most of the reservations, at which the Indians exhibit their farm products, live stock, etc., in competition with each other, suitable prizes being awarded on the best exhibits. Certificates of merit, over the signature of the Commissioner and under the official seal of the Indian Office, are also given in deserving cases. These fairs are generally managed by the Indians themselves, through the medium of organized fair associations with Indian officers, under the supervision of the superintendent, which gives them practical experience in business organization and management.

An important feature of such fairs is "the baby show," where the Indian mothers bring their little ones "in best bib and tucker," cash prizes and certificates being given the winners.

Indian exhibits were also shown at county and State fairs, in conformity with the practice inaugurated several years ago, on a larger scale than formerly, with continued good results, many prizes being awarded the Indians in open competition with other exhibitors. Their success along this line portends the final abolishment of the strictly Indian fairs on the reservations, and universal participation by the Indians in the State and county fairs on the same basis as the whites.

INDIAN EMPLOYMENT.—From his war experience the Indian has gained a wider vision of life, which has quickened his thought, opened his eyes to opportunity, and stimulated him to action, and many Indian soldiers have thus found work through the exercise of their energetic initiative. Indian youths have been working in this country on motors for Army trucks, tractors, and airplanes, and in France as repair men on motor-driven vehicles, and a number from overseas have returned to the factories for electrical engineering and other kinds of mechanical activities. Applications for automobile factory work are coming in steadily, and all worthy Indians so disposed are given a chance to become skilled mechanics in this way.

In that section of the Arkansas Valley between Rocky Ford, Colo., and Garden City, Kans., Indian students from seven schools in the Southwest worked in the sugar-beet fields and factories, over 400 students being thus engaged from the middle of May until the last of December. In the evenings they enjoyed athletic activities, baseball, and band concerts, besides being supplied with magazines and other reading matter. Progress was impeded by the outbreak of Spanish influenza in the camps, three-fourths of the boys being in the hospital at different times with this malady.

Many Indians found lucrative employment in the cotton fields of Arizona, particularly the Papago, who do the best work with Egyptian cotton.

Many Indian girls were employed in clerical work, and as cooks, teachers, and housekeepers in schools, and others as nurses in Army hospitals in this country, besides three in France with the Red Cross.

The extent and the variety of the work in which the Indians have been engaged, and the fact that many from remote districts who have never before shown such interest have asked for employment, presage economic stability and progress.

HEALTH.

If the figures of the epidemic of Spanish influenza could be deleted from the statistical tables and the sorrows of that visitation effaced from memory, the health record of the Indians of the United States for the fiscal year 1919 could be written as normal, notwithstanding

the fact that the facilities of the service were greatly impaired by war conditions. The corps of physicians which at the time of the signing of the armistice was scarcely one-third of its normal numerical strength, has been undergoing rehabilitation, and at the close of the period covered by this report it was gradually approaching its full complement. The nursing corps is still greatly depleted and many positions are being filled temporarily by practical nurses.

During the period of the war on some reservations physicians were required to take over the work of two or three other medical districts; in certain localities no medical service could be maintained other than the supplying of simple remedies.

To relieve the situation incidental to the shortage of physicians and nurses the Civil Service Commission waived the maximum age limits and changed the form of examinations from assembled to nonassembled. Through this courtesy and by aid of employees who were willing to perform extra duty it was possible to preserve in some form the integrity of the different health services even at the most remote stations.

During the epidemic of Spanish influenza a plan of cooperation was effected between the Public Health Service and the Bureau of Indian Affairs, by which the emergency was well met, and I desire to express appreciation for the timely assistance rendered by the Surgeon General.

The Chilocco School was a notable example of the efficient control of the influenza epidemic, not a single case having developed among the more than 500 Indian students and large corps of employees.

While every employee of the Indian Service, by virtue of his position and duties, is concerned with health, which is not secondary to any other activity, those designated as health supervisors, special physicians, special nurses, agency and school physicians, general nurses, field matrons, and field dentists, are charged with the principal duties and responsibilities pertaining to the physical welfare of the Indian people.

The health supervisors visit the various reservations and schools for the purpose of advising with the other health employees and gathering information for the office; special physicians are employed primarily to combat trachoma, but it is required that they shall be qualified specialists in diseases of the ear, nose and throat, as well as in diseases of the eye. In addition, they must be prepared to act as epidemiologists, for they are frequently detailed to take charge of local epidemics of dangerous communicable diseases. Special nurses are attached to the service of special physicians. Agency and school physicians, whether employed under contract or regular appointment, perform the duties indicated by their designations, and general nurses are nurses employed at the various schools and

hospitals throughout the service. Field matrons have a multiplicity of duties. Improvement of home, educational, moral, sanitary, environmental, and social conditions among the Indians is to be regarded as the primary object of their work. Though it is the duty of every employee of the service, regardless of his position, to do everything possible to contribute to such improvement, both by effort and by example, the field matron, whose duties bring her into the closest relationship with the family, especially the mothers and daughters of the home circle, is particularly charged with the responsibility of developing higher standards of living, of inculcating the desire for progress and of evolving plans to make the home more attractive. Field matrons are assigned a leading part in the organized effort to save the babies and keep them well, and they also act as field nurses in combating tuberculosis, trachoma, and other diseases.

The traveling field dentists are among the most useful employees of the service. Their professional aid at the schools and reservations largely promote conditions among the pupils and adult Indians now generally regarded as definitely essential to bodily health.

The facilities for the treatment of the sick have increased with the progress of medicine. From the primitive dispensary clinics of early days there have developed the hospitals and sanatoria of the present, with their laboratories and special equipment. The guess methods of diagnosis have given place to scientific tests, and the former occasional word of admonition on health has been superseded by graded instruction in hygiene and physical culture which extends through all grades as outlined by the course of study. The hope of the Indian—his development, physically and industrially—lies in his educational opportunity. Since sanitation is a compulsory subject of the curriculum of instruction, in the course of time the principles taught will blend with the daily life and conduct of the people and exert a transforming influence upon their future.

With the addition of trachoma as an exception, although this disease also prevails among white people, the health problems as they occur among the Indians are the same as those that pertain to rural communities throughout the country, and the needs are the same—better housing conditions, greater industrial prosperity, better water supplies, and all the factors of protection that make for health and longevity. Our efforts cover the whole range of sanitary and medical prevision and aid, beginning with prenatal care and extending on through life to the care of the aged and finally to the burial of the dead. While each duty is important, I would, so far as practicable, emphasize as the most important those things which prevent disease by increasing the resistance of the body cells through proper nutrition and well ordered living, thus making it possible for

one, who may not have escaped infecting organisms, through the strategy of knowledge and the tactics of hygiene, to find protection in the defenses of nature.

So, believing proper nutrition to be one of the principal armaments of preventive medicine, I have sought to encourage and promote Indian industry in general and Indian farming in particular; I have tried to make agriculture and thrift the pillars of a health arch of which the keystone shall be sanitary education. Poverty and disease are handmaids of destruction and despair and any health policy designed to affect a race must make provisions to overcome these conditions and offer to the people prosperity and hope, encouragement and comfort.

I have purposely avoided including comparisons in this report, for on account of effects of the epidemic of Spanish influenza they would be of very little value in studying the general conditions of health. Statistical figures appear in the various tables under appropriate headings, and those pertaining to the epidemic will be incorporated in the reports of the United States Public Health Service and in the bulletins of the Bureau of the Census.

In general it may be said that apart from the invasion of the Indian population by the great pandemic, the year covered by this report showed progress in health matters; the number of hospitals was slightly increased, the field matron service and the medical corps strengthened.

I have very definite plans for the expansion of the health service for the next fiscal year, subject to Congressional appropriations. As will be recalled, two health drives operated in the Five Civilized Tribes during the months of July, August, September, October, and November of 1917. One of the drives was carried on among the Cherokees and the other among the Choctaws.

From my knowledge of the health conditions of the Indians of that jurisdiction, gained from reports and observations, and from a study of the statistics of those drives, I am convinced that a permanent health organization of sufficient proportions to extend its influence to every restricted Indian of that superintendency is needed. The immediate purpose of those campaigns was to improve the very bad conditions, and instructions were given to those engaged in the work to give their first attention to home betterment; to sanitation and ventilation; and to hygienic relations bearing upon the prevention of tuberculosis and other communicable diseases.

Now that the war is over, I intend to renew my request to Congress for the funds to complete and make effective these preliminary campaigns for health betterment among the Choctaws and Chickasaws.

With a view to restoring and strengthening our health work, and especially the service of field matrons, I issued near the close of the

year an appeal to all employees, in the hope that the sentiment and views expressed would, under more promising facilities, lead to better organization and corresponding results. This letter follows:

JUNE 18, 1919.

To superintendents, physicians, field matrons, and other employees:

In the Indian Service it is never untimely to preach the gospel of health, but it is especially opportune to do so now when all that enters into the inspiring word "Americanization" summons us to great action. Though the thunders of world strife are stilled we shall not complete our victory until we put into the arts and activities of peace the high purpose and patriotism that gave our best lives and billions of treasure for freedom and justice to all mankind. Our nation henceforth must rest on a citizenship that will prove the efficacy of the ideals we fought for, and for which the Indians touched elbows with the white man on all the heights of heroism. This proof must appear in the unity, the intelligence, the freedom of opportunity, and the mass progress of our people. We are thus called by the triumphs of war to win the equally renowned victories of peace which can be fully told only by coming historians, but which in a sentence means the development of an American people of one language, one love of liberty, one loyalty to law and justice.

In this exalted task, we of the Indian Service have a definite part. It is not only our duty to see how many Indians are among the five and a half millions in the United States who can not read or write any language, or the 3,000,000 over school age who can not speak English, or the one-fourth of our drafted Army who could not read their orders or write home in English, or the 6,000,000 of underweight children in the United States, but we must overcome these conditions so far as they exist on the reservations, and first of all we must have a vital and physical basis to build on. Our fundamental and best work must be in the saving of life and in making life healthy. The monument we build to Indian soldiers, living or dead, should be in the lives of those remaining under our care.

The progress of every people is primarily conditioned upon corporal efficiency. The greatest attainments of civilization do not spring from enfeebled flesh and blood.

I have often emphasized the thought early in my administration, and now give it earnest reiteration that it is our chief duty to protect the Indian's health and to save him from premature death. It is of first importance that we reestablish the health and constitution of the Indian children. Education and protection of property must not be neglected, but everything is secondary to the basic condition which makes for the perpetuation of the race.

We have had some splendid successes in the direction of improved health and vigor among Indian babies, as shown by competitive tests. We have increased all our facilities for medical treatment and nursing. We have recently seen a steady gain in birth rate and decreasing death rate. We have accomplished much betterment in home life. But these and other gratifying results must serve chiefly to stimulate our efforts and to improve our organization for greater achievement. We released many from our health service for the emergent needs of war, but we are restoring them or filling their places, and shall widen their work.

I feel that we are at the day-spring of a new and glorious era in all that pertains to health and the vital possibilities of a great people, and are ready as never before to respond understandingly to the great Teacher's promise: "I came that ye might have life and that ye might have it more abundantly." The abundant life must come through physical, as well as mental and spiritual health. As we emerge from the forces of havoc and death, the impelling thought and aspiration of the hour are reconstructive, renewing, expansive. There is an eagerness to look forward, to move upward, to restore and heal. The swift advances in the science of surgery and medicine, the

quicken humanities of world-wide relief, have bequeathed to us an inspiration to cure and prevent disease, to build up and make strong, and unless we act upon it, we are disloyal to the war's greatest spiritual triumph. We must be instant to grasp the miraculous things done to prevent disease in vast bodies of men. We must appropriate and practically apply the marvelous reduction of war deaths from infectious conditions. We must practice scrupulously the object lessons given by military camps in all matters of health precautions which have so successfully maneuvered against communicable disease through the common essentials of water, air, food, clothing, sewage, exercise, and inoculation. Typhoid and many germ diseases are no longer more destructive than the enemy's guns and gas. These are negligible foes through persistent sanitation and other prevention practicable for every community. We have learned that military morale is chiefly another name for health, for the healthy are seldom downhearted or deficient in courage.

Morale is a good watchword under which to rally all our service personnel, all our pupils, all our returned students, and progressive Indians for a new drive against disease of every description. Health is almost wholly a matter of education, of organization, of cooperative enthusiasm. The health leagues started in many schools should become nation-wide. Hygienic living costs little beyond such actual necessities as food, clothing, water, air, fuel, shelter, work, play. Never before has there been such full and reliable guidance to good health as comes now from the Public Health Service, the State boards of health, and the copious literature on right living from medical and trustworthy sources. To-day there would be no wit or logic in the eloquent agnostic's suggestion for improving the Almighty's plan by making good health catching instead of disease, because the contagion of good health is a fact, and is being demonstrated wherever intelligent effort correlates with nature.

I do not see how our service can be anywhere but in the vanguard of this great health movement which has awakened such serious interest, and to be there our Indian schools must reorganize for more effective results. Many of our school periodicals contain in nearly every issue the essential rules for practical hygiene and sanitation. What we probably need is a more systematic plan for creating interest in, and the performance of, what we know ought to be done. The element of a proper incentive is very important with children until practice develops habit, or the joy of health becomes a conscious reward of obedience to instruction. I also regard as of special value such supervision of exercise or athletics as will bring individual benefits to all pupils. The competitive game is a great and wholesome thing, under right control, but every pupil should get into it. All should be actors, and not mostly spectators. But enveloping all our efforts, should be the stirring influence of a health atmosphere, even breezy in its expression of the zeal and confidence of every employee that health must come first and that everybody must have it. I can not believe that many forms of disease can stand against such cooperation inspired by the Superintendent, counseled by the physician, administered by the faithful nurses and matrons, and assisted by the encouragement and sympathy of all.

In this appeal, I have somewhat especially in mind the duties of field matrons and desire to awaken a revival of interest in their work which is so needful to all health and home welfare on the reservations, and to secure for it the support its importance demands.

We must continue more resolutely our contest against disease and insanitation in the family life of adult Indians. Emphasis is given to my earlier declaration, that every Indian hospital bed not necessarily occupied by a sufferer from disease or injury should be available for the mother in childbirth. No baby should be born in the midst of infectious conditions. There must be no neglect of any woman approaching the sacred period of motherhood, and in all this work of home uplift and purification the responsibility rests heavily upon the field matron, who under the direction of the superintendent is entitled to his sincerest aid and council.

The position of field matron is much more than a job. It is an opportunity for service to others; an opportunity for self-sacrifice in the interest of humanity; and for the exercise of the highest attributes of mind and soul in a preeminent cause. The position should be filled only by women who have the desire and the aptitude to teach the things that influence human lives for good and fill them with higher aspirations.

No woman should seek or hold the position of field matron who is not endowed with physical strength, with strong moral and mental force, and with the real missionary spirit—a spirit of helpfulness that finds expression in a fervent desire to better the condition of a worthy race that is struggling upward to a realm of higher life, for without these qualifications, the duties will be uncongenial and success can not be attained. The material remuneration is not large and the discouragements and adversities are many. The rewards are chiefly in the sacrifices.

While varied circumstances and conditions are responsible to a great extent for failure, success depends, in a large measure, upon the field matron herself; upon her spirit of helpfulness and sacrifice; upon her fitness for her calling; and upon her moral force.

A field matron, to be successful, must have a profound personal interest in the Indian people and an abiding faith in their possibilities and in the ultimate success of her work. She must labor for the general welfare of all, regardless of their attitude, their status, their character, their reputation, or their condition. If any distinction is made, it should be in favor of those who are farthest down in the scale of life, because their needs are the greatest.

Because of the great importance I attach to the mission of the field matron, I am inclosing herewith a more specific outline of her responsibilities and duties and shall expect every such employee to acknowledge the receipt thereof.

CATO SELLS, *Commissioner*.

SUPPRESSION OF THE LIQUOR TRAFFIC.

The task of suppressing the liquor traffic among Indians is one which requires constant watchfulness, vigilance, and resourcefulness, in the apprehension and prosecution of offenders. This branch of our service is kept moving all the time to protect our Indians from the evils resulting from the use of liquor, and while substantial progress has been made during the past year, the liquor forces continue to violate the law wherever it seems possible to acquire huge profits, taking great chances and becoming desperate and dangerous when interfered with.

The year has been an active one notwithstanding the war restrictions imposed upon the manufacture and sale of liquors. There were 1,516 new cases instituted during the year; 2,135 cases disposed of; 33,924 gallons of various kinds of intoxicating liquors seized and destroyed; and 112 automobiles engaged in the illegal traffic libeled and sold for \$42,869. Fines were assessed in the amount of \$82,460. Operations during the fiscal year covered 27 different States and include prosecutions for violations of State, Federal, and municipal laws.

The legislation contained in the act of May 25, 1918, making possession of intoxicating liquor within Indian country an offense was

strengthened by the following provision contained in the act of June 30, 1919:

Provided, That on and after July 1, 1919, possession by a person of intoxicating liquors in the Indian country or where the introduction is or was prohibited by treaty or Federal statute shall be an offense and punished in accordance with the provisions of the acts of July 23, 1892 (Twenty-seventh Statutes at Large, p. 280), and January 30, 1897 (Twenty-ninth Statutes at Large, p. 506).

The act of June 30 also provided for a continuation of the protection of the Nez Perce Indians by extending for ten years the provisions of Article IX of the agreement with said Indians dated May 1, 1893.

In my last report I referred to the necessity of invoking the authority of section 2087 which provides that no annuities or moneys or goods shall be paid or distributed to Indians while they are under the influence of intoxicating liquor, nor while there are good and sufficient reasons for those whose duty it may be to make such payments or distribution to believe that there is any species of intoxicating liquor within convenient reach of the Indians. The lesson has been a good one, so that there was no occasion during the year again to invoke its provision.

Several complaints reached me to the effect that a Minnesota concern was shipping California grapes to consumers in Minnesota territory for use in making grape juice and that Indian Service liquor suppression officers were destroying unfermented grape juice in large quantities. On investigation it was discovered that many carloads of California grapes were being shipped into the territory covered by the Indian treaty containing the prohibition against intoxicating liquors, but that they were not being used for making "grape juice" in the ordinary sense of the word. Thousands of gallons of wine in the various stages of the making were destroyed, but where grapes were legitimately being used for ordinary unfermented grape juice, no action was taken against any person.

Indicative of the benefits to the La Pointe Indians by reason of the city of Ashland, Wis., going dry, beginning with July 1, 1918, the local press of that city printed a statement showing the arrests for the last six wet months (January to June, inclusive, 1918) were 1,366, while the total arrests in the first six months under the dry law (July 1 to Dec. 31, 1918) were 236. It is also said that the arrests in May (374) and June (347), 1918, dropped to 36 in July and grew less thereafter.

FARMING.

It seemed to me quite clear that post-war conditions would require a continuance of increased production in all farming activities, in order to satisfy the pressing demands of many foreign countries for

the necessities of life, and to supply domestic consumption with as little soaring of prices as possible. With a view, therefore, to maintaining vigorously the previous year's agricultural campaign, I sent on January 25, 1919, to all superintendents the following letter of instructions:

Our farming operations last year were largely successful. We fulfilled the slogan: "Food will win the war." Now that the war is won, we find that food is essential to peace. The vast areas ravaged by the enemy will not soon be normally productive. Much of northern France is a picture of devastation. Russian agriculture is under the blight of bolshevism. Expert statisticians declare that the world, outside of the United States, will need 15,000,000 tons of foodstuffs above present supplies to carry it to the next crop. Whatever shall be written into international pacts or covenants, we face the old truth that peace and starvation are not friendly partners; that famine breeds disorder and insurrection. It is generally conceded that aid for underfed populations is an acute and alarming need, and it behooves this great country of ours which turned the world's forlorn hope into victory, to help supply the markets of hungry millions who were not responsible for their misfortune. It should be ours to lead in making secure the arts of peace in a world emancipated from the lust of war. Our soldiers from the battle front have set us this task, and I urge you to carry as an inspiration to every employee and to all Indians the fact that we are at the entrance of a new industrial era which will demand not only greater and more varied domestic supplies but vastly larger exports than ever before.

Therefore, last year's campaign, good as it was, must be renewed and stimulated to greater results. Preparation for the seed time can not begin too early. Forethought should be the watchword of every farmer and gardener. War gardens have convinced us of the necessity for peace gardens. Last year thousands of families supplied their tables chiefly from their gardens, had better health, and released more non-perishable supplies for shipment. No man, Indian or white, is justified in buying vegetables if he has land that will produce them. The root cellar should be reckoned as indispensable. I desire that our schools everywhere give increased attention to gardening, canning, drying, and the proper storing of vegetables as a dietary and economic gain. Some schools have thus taken a long step toward self-support. Others can do equally well. All Indians on allotments should be especially urged to have gardens and get in the way of using more vegetables as food. Wherever potatoes can be grown there should be little need for shipping them in. In these small, as well as the larger agricultural activities, you can hardly overdo efforts to have the Indians look ahead for the next season's tillage and harvest by timely preparation. The tendency of hand-to-mouth living is thus largely overcome.

In the more extensive lines of farming you should give prompt attention this year to the considerable area of agricultural land still unused on many of the reservations and have the Indians, themselves, bring it under cultivation, so far as available facilities, funds, and good business judgment will justify. If there is a balance they can not handle, it should be leased to the best advantage under existing laws and regulations. For Indians desiring to farm, but are not properly equipped to do so, the matter of seeds and implements should be given careful and active attention, so that supplies may be on hand when needed. It is preferable, of course, for the Indians to purchase their own seed and implements from individual funds when available, but if not, the supplies may be furnished in return for labor, or in the case of seed, to be returned in kind at harvest, provided you have applicable and available funds in your allotment which you care to utilize therefor, as it is unlikely that any additional allotments can be made for this purpose. In previous years it has been customary to furnish considerable supplies of this nature on the reimbursable plan, either from the regular re-

imbursable appropriation or from tribal funds subject to expenditure in this manner. However, there is a very small balance in the regular reimbursable appropriation which will be entirely insufficient to permit the purchase of seed and implements therefrom on the same scale as in previous years, although if you have any unhypothecated balance in your allotments of tribal funds available for support and civilization purposes within the limitation imposed by the Indian act for the current fiscal year, such as "Indian moneys, proceeds of labor, Indians' support, 1919," it can be utilized for the purchase of seed and implements for Indians on the reimbursable plan if not required for other necessary purposes. I especially desire that you move early and definitely in these very essential preparatory matters and keep continually before the Indians the necessity of complete readiness for spring work and for bumper results.

The replies indicate a full recognition of their responsibility along this line on the part of the superintendents, employees, and the Indians, and a considerable increase in crop acreage on many of the reservations over that cultivated during the war. There are quoted below extracts from several reports, which will serve to show the attitude of our field service and something of the results it is hoped to accomplish.

Last year we cultivated every foot of available land. We raised an excellent garden, had quantities of early vegetables for canning, and our large root cellar was filled to the brim with winter vegetables. From an acre of alfalfa five tons of excellent hay was raised, and about one hundred bushels of corn from two and one-half acres of thin land.

Our farmers are now arranging to secure seed oats and potatoes. Gardens are now being ploughed and ground is being prepared for seeding oats. Prospects for a large wheat crop are excellent. Many reports reaching this office indicate that our restricted Indians are showing unusual interest in preparing for aggressive farm work. Considerable new ground is being cleared, the soil is full of moisture, and the season is in many respects opening under very favorable conditions.

The matter of having every available foot of agricultural land within this jurisdiction placed in cultivation has been kept in mind, and it is believed that the increase for the coming season over last season is approximately 8 per cent. Every allotment suitable for agricultural purposes has either been leased or is being farmed by the Indians themselves.

An effort has been made to induce each family to have a garden, with very satisfactory results. An increase of about 200 per cent was made two years ago, which was maintained the past year. The coming year will probably make an equally good showing, although the demand for labor and high wages paid has taken many of our Indians from their home work.

We began our farm operations last fall as soon as the crops were removed. We have prepared and have ready as much of the land as was possible and we are still continuing the preparation. We saved from our crops last year seed corn, seed wheat, and other seeds and have already invited bids and placed orders for those required and not raised for the coming season. We will have a larger acreage this year than last and believe the production will be greater per acre.

The necessary steps have already been taken under this jurisdiction in the way of securing seeds for the Indians of this reservation to be used in connection with their farming operations. We are also endeavoring to secure a goodly supply of various kinds of garden seeds for issue to Indians to interest and encourage them in raising a large amount of vegetables for their own consumption. Everything in our power is being done to have all raw lands subdued and placed under cultivation during the

coming farming season. Everything is being done to make the coming season a greater success than the last.

We shall have a larger acreage this year than last; practically every Indian family has a garden, and many of them will raise considerable quantities of garden stuff if we have an average season.

During the fiscal year 1918, \$4,200 was expended for irregular labor in connection with agricultural activities, placing in cultivation over four hundred acres, more than half of which was unfenced and in sagebrush in the early spring. From that acreage 55,000 pounds of oats, 64,000 pounds of wheat, 20,000 pounds of corn, 40 tons of potatoes, 10 tons of sugar and stock beets, 500 tons of straw and forage, and large quantities of cabbage, onions, turnips, and rutabagas were harvested. Additional areas were cleared of sagebrush, 60 acres seeded to winter wheat, and approximately 100 acres is ready for spring seeding, all of which puts us in better shape for early spring activities.

Our Indians are actively engaged in preparations for a larger acreage than last year. More of them will put out gardens than before. The fact that one of their number raised a garden last year that was pronounced the best in the county, and which carried off first premiums at Nevada State Fair, has had a wide-reaching effect.

While it is too early to give complete figures as to results, preliminary reports and estimates justify the belief that there will be substantial increases over the previous year. It is my hope to maintain the high standard of war period accomplishment in order that the industrial progress of the Indians may continue unabated under the impetus thus given it. That there is substantial basis for this hope is found in the fact that, while the patriotic enthusiasm for increased production may be less active now than during the war, there are definite signs that many of the Indians are acquiring the "habit" of sustained industry, which will give permanence to their progress along successful lines.

A most encouraging element in the situation is the fact that the use of agricultural machinery, modern improved methods, etc., is constantly growing among the Indians, with consequent better and more remunerative returns in crop production. This has been increasingly reflected in improved homes, live stock, and the acquisition by the Indians of the varied appurtenances of civilization to a greater extent than formerly.

Hailstorms on the Crow Reservation, in Montana, and grasshopper outbreaks on the Southern Ute Reservation, in Colorado, and the Moapa River Reservation, in Nevada, did considerable damage to crops during the year. While, of course, the hailstorms can not be controlled, remedial measures have been taken, which it is hoped will result in the complete eradication of the grasshoppers and the prevention of serious ravages in the future.

EXPERIMENTATION.—Systematic experimentation work has felt the disturbance of normal conditions more than some other lines and was confined to the cooperative farms at Sacaton, on the Pima Reservation, in Arizona, and the date farm at Palm Springs, under the Malki jurisdiction, in California.

Cotton experiments have as hitherto constituted the principal feature on the Sacaton farm. Pure strains of the now famous "Pima" variety, which was originated on this farm, are maintained, and experiments for the development of new types still higher in value are in progress. Demonstrations to determine the best time for planting and the most profitable spacing are in progress. High-grade Pima seed has been furnished the Indian farmers of the reservation, and personal advice in the planting and management of their crops has resulted in fields which compare well with those of the best white farmers in the Salt River Valley.

A simple planter attachment devised by the station superintendent has enabled the Indians to secure a greatly improved stand of cotton plants.

The development of an improved variety of Bermuda onions, begun some time ago, has been continued, and a field of seed onions of the past season has demonstrated the value of a seed-growing industry for the reservation.

Several years ago land was selected for an addition to the farm, to be used largely for seed production purposes. Work on this addition during the year has been necessarily of a developmental character, as the raw mesa land must be brought into proper tilth and supplied with humus before the best results can be obtained. The quantity and quality of the water supplied by the new wells drilled on this farm are most gratifying, and the pumping plants have been brought to the highest state of efficiency. The new land has responded to cultivation in a very satisfactory manner, and the growth of improved varieties of alfalfa, grain sorghums, and wheat gives promise that the purposes of the farm will be fully met sooner than was at first expected.

The date and olive work has profited much by the transfer from the cold night air of the river bottom land of the station to this new location. The growth and offshoot production of the date palms is much more rapid in the warmer situation. An offshoot propagation house has given splendid results in rooting shoots, which will be later distributed to the more progressive Indians.

Peach and plum trees and other deciduous fruits have started with excellent growth under irrigation from the alkali-free water of the new wells.

COOPERATIVE EXTENSION WORK.—The States Relation Service of the United States Department of Agriculture, in cooperation with the various State agricultural colleges, has an effective organization for the dissemination of agricultural information among the people of the different States, under the provisions of the Smith-Lever law. The Indians receive the benefits of this work on prac-

tically the same basis as the whites, and it has been a prominent factor in the promotion of the welfare and progress of the Indians along agricultural lines.

STOCK RAISING.

The Indians have made continued progress in the live-stock industry during the past year, even beyond expectation, in view of severe drought which prevailed in the southwest for the past three years and is now affecting live-stock interests in Wyoming and Montana.

These conditions have become so threatening that it is necessary to materially reduce the number of stock in the tribal herds and belonging to the Indians on the various reservations in those States. Some shipments to market have already been made and plans are in progress to reduce the stock to such number as can be carried through next winter on the available supply of feed without danger of serious loss.

The Indians of the Navajo Reservations have suffered considerable losses of sheep in consequence of drought and the hard winters following. Investigation at the various wool markets indicated that the improvement in the grade of the wool shipped by these Indians was gratifying, but that better methods of shearing and handling the same would result in a higher price. A campaign has, therefore, been started with the view of having the Indians properly prepare their wool for market next season, and for assisting them in the further development of their live-stock interests.

The purchase of first-class bulls by Altaha R. 14, an Indian of the Fort Apache Indian Reservation referred to in last year's report, has demonstrated to the Indians the benefit they will derive from raising first-class animals, and the council has unanimously requested that the bulls needed to improve their stock be purchased and placed on the range, or that a project be established to produce such animals on their reservation.

In addition to the natural increase of stock on the various reservations, there have been purchased during the past year a total of approximately 3,200 cows and heifers, and 450 steers.

The suppression of contagious diseases among the live stock of the Indians has progressed satisfactorily and on several of the reservations in Montana and North and South Dakota, dourine eradication work has been completed and the ranges are reported to be free of animals infected with disease.

The movement for ridding the Indian ranges of wild horses is being carried on energetically, but the lack of a market or a satisfactory method of disposing of such animals has somewhat retarded this work.

The interest that a large part of the Indians are taking in raising live stock shows that they appreciate the benefits accruing to them

from greater activity in such industry, and this example is stimulating many others to improve the grade of their stock and their methods of caring for it.

IRRIGATION.

Irrigation on Indian reservations played no unimportant part in the production of foodstuffs during the war period. The Indians responded nobly to the call for greater production and materially increased the acreage cultivated and the yield per acre.

A good deal of the allotted irrigable land on various reservations belongs to minors and adults who, on account of age or other physical disabilities, are unable to properly cultivate their entire holdings. Such lands have been leased, under favorable terms, to the mutual advantage of the Indian lessors, the white lessees, and the community at large, including, of course, the reservation on which such land may be located.

The cost of construction, operation, and maintenance on irrigation projects has increased proportionately with the constantly rising cost of labor and material. On the other hand, much saving has resulted from the use of machinery such as dredges, drag-line excavators, ditch-cleaning machines, etc. Wherever machinery of this kind could be employed, it has been used to great advantage, not only in the actual saving of dollars and cents but in the increased quantity and quality of the work performed, with less hire of actual labor, thus relieving to some small extent the demand on the labor market. On the Yakima Reservation, Wash., more than 800,000 cubic yards of earth were removed at a cost of less than 11 cents per yard. Many miles of canals and ditches were cleaned while water was flowing therein at a time when it was practically impossible to procure men and teams with which to do the work.

The severe drought conditions that have prevailed throughout the West generally during the past three years demonstrate forcibly the need for irrigation. Without irrigation on many of the reservations in Arizona, Idaho, Wyoming, Montana, and Utah, great distress would have resulted among the Indians.

YAKIMA.—The largest expenditures and likewise greatest returns have been on the Yakima Reservation, Wash. The work done consisted principally of extending canals, laterals, and drainage ditches, the building of check and turnout gates, drops, bridges, etc. Just as rapidly as the system was extended new land was put under cultivation. This project yielded over \$7,000,000 worth of crops last year and, with the increased acreage, it is expected that the gross yield will approximate \$9,000,000 during the current calendar year.

FORT HALL.—The Fort Hall Reservation, Idaho, lies in the recently drought-stricken district. With the storage facilities here-

tofore provided, however, this project will go through the season without detriment to our irrigation activities. Projects belonging to private parties in this locality are suffering greatly owing to a lack of storage. During the past year this project produced \$890,000 worth of crops and it is expected that this amount will be greatly exceeded during the present year. The project at this point has not been completed and before all the Indian land can be supplied with water a considerable sum must be expended to enlarge and extend the present system. White land owners above this project have been using it, at times, as a convenience by dumping waste and surplus waters into one of the Government canals. Considerable annoyance and expense have resulted from this during the several years last past. The recent drought condition has eliminated this difficulty for the present year at least, but it will probably give us trouble until some adjustment is reached. The Department of Justice is now investigating the matter with a view of taking appropriate steps to relieve the situation.

UINTAH.—The Uintah project in northeastern Utah suffered greatly from the prevailing drought. We have no storage facilities here but must depend on the natural run-off which, at times, and especially during drought seasons, is far from sufficient. Ditches and lands in white ownership are located above the Indian lands and in past years considerable damage to the interests of the Indians has resulted from the whites taking and using the available water. Proceedings were instituted by the Department of Justice in behalf of the Indians and under a temporary order of the court this abuse has been corrected to a large extent. Final decree has not yet been entered, but it is confidently expected that the Indians will be fully protected when the decree is made.

WIND RIVER.—The Wind River Reservation, Wyo., is also in the drought belt. Rapid strides have been made in the development of irrigable lands on this reservation during the past two years, but further progress is temporarily checked at least until the natural flow increases or storage is provided. The snowfall in the mountains during the past winter, which furnishes the water supply, was very slight and the streams began to fail early in the irrigating season. Absence of rainfall later in the season created a serious shortage and the crops undoubtedly will be curtailed to a considerable extent. Experiences of this kind furnish forcible lessons in the economical use of water and, in the end, may prove of great benefit to the project at large. During the past year about \$400,000 worth of crops were raised here. Results for the present year are not yet known and in view of the drought conditions the aggregate yield may be substantially reduced.

CROW, MONT.—A large amount of land was placed under cultivation on this project during the past year, principally under the "dry-farming" method. The irrigated areas only will yield profitably, however, as the drought has been particularly disastrous in this locality. The streams here are now carrying less water than ever before known, either to Indians or whites. Heretofore flood waters from the Big Horn River have proven ample for all requirements, but in June of this year it became necessary to construct a temporary dam across this stream in order to divert sufficient water for irrigation purposes. Increased irrigation activities adjacent to this reservation and the development of additional areas by the Indian Service, the Reclamation Service, and private parties, will necessitate the construction of a permanent diversion dam for the Big Horn project. This should be done in the near future. The Crow Reservation is chiefly adapted to stock raising. Whether it is suitable for even limited farming operations, without irrigation, remains to be proven, but with the present drought confronting us the Indians would have been in an exceedingly critical position if it were not for the produce yielded by the irrigated areas.

FORT BELKNAP, MONT.—Practically all the farming done on this reservation is being conducted by the Indians. The present and recent high prices of farm products have stimulated greater and more economical use of the irrigation facilities. Additional areas are being cultivated and better farming methods used.

MISSION RESERVATIONS, SOUTHERN CALIFORNIA.—The irrigable areas on these small mission reservations are exceedingly limited and in many instances offer opportunity for the Indians to make only a bare living. Accordingly, the reservations are used chiefly as a base of operation, the Indians maintaining homes there and raising a part of their sustenance; seeking work elsewhere for the remainder. These Indians will be found in trusted positions all over southern California, and the fact that they at least have homes to which they can return makes them more independent, and doubtless has much to do with their stability and trustworthiness.

COLORADO RIVER.—In order to determine the feasibility of a large gravity irrigation project on this reservation, a force of engineers and assistants has been engaged in making surveys, plans, and estimates. The work has been much handicapped by the shortage of man power but it is being continued with the expectation that a full report will be ready for presentation to Congress at its next session.

GILA RIVER.—Efforts were made to obtain satisfactory proposals for the construction of a dam across the Gila River near the agency at Sacaton. Advertisements were issued on two occasions during the year, but no response to the first advertisement was received, and to the second, only one bid. This was so high that it was rejected. As

this appropriation was based on estimates made several years ago, when labor and material were much lower, additional appropriations are necessary before the work can be undertaken.

The act of May 18, 1916, carries an appropriation for the construction of a diversion dam across the Gila River above the town of Florence, Ariz., but stipulates that the project should be undertaken only in the event that it shall be found feasible and that a satisfactory adjustment of the conflicting claims to water between the Indians and the whites could be reached. Negotiations were promptly begun, but much valuable time lost because representatives of white land owners in the valley insisted on a division of the available waters that was manifestly unfair to the Indians. On my repeated and earnest insistence that the rights of the Indians must be fully recognized and protected an agreement was finally reached under which the project will be limited to 62,000 acres, of which 35,000 acres are to be Indian land. In determining which particular tracts of land in white ownership that are to come into the project, aggregating 27,000 acres, regard is to be had to the areas previously cultivated, those having established water rights recognized by court decree, and any other factors deemed material. Representatives of this bureau went into the field with instructions to obtain individual contracts from claimants of land in private ownership within certain boundaries indicated by engineers as being the feasible, economical exterior limits of the project. This resulted in obtaining contracts covering something over 80,000 acres, included in which are between 12,000 and 13,000 acres claiming vested water rights. These facts are all to be considered in designating the 27,000 acres in white ownership that are finally to be included in the area to be served. It is expected that these designations will be made shortly, thus paving the way for the project to be declared feasible, as required by law. Plans and specifications of the dam have been prepared and it is hoped that actual construction can be undertaken in the near future.

PAPAGO WELLS.—Additional wells have been installed and the old ones operated, thus enabling these deserving Indians to use larger grazing areas and attain greater success and industrial advancement. Without wells for stock watering purposes these Indians were unable to increase their holdings. While their reservation is comparatively large yet the rainfall is scant and the pasturage indifferent. Stock raising is the chief industry and practically the only means of support for the Indians, except such as can be obtained outside by actual day labor.

NAVAJO AND HOPI OF ARIZONA AND NEW MEXICO.—These Indians have a large area of practically desert land. Irrigation is being rapidly developed in the few places possible. The predominant industry, however, is raising live stock, and there are now nearly a

million sheep and goats on this reservation. To obtain food and water for this stock is no small problem, and available funds have been spent in sinking and equipping new wells. The Navajo country, as well as that occupied by the Papago, presents a problem somewhat peculiar. Large areas covered with forage more or less scant cannot be used for pasture, owing to the distance to water for drinking purposes, there being but few living streams or springs in this entire country. Wherever underground water can be developed by small and frequently deep wells, it means the utilization of forage that otherwise would be wasted. The Indians eagerly avail themselves of these additional facilities and frequently, when a new well is nearing completion, their herds of sheep, goats, and cattle may be found awaiting the expected water supply. Additional funds are urgently needed for further development in this most worthy cause. Thousands of acres affording reasonably good pasturage could be profitably utilized if water can be made available for stock watering purposes. The Indians themselves would not only thus be greatly benefited, but it would add in no small degree to our meat supply.

PUEBLO.—Aid has been extended to the Pueblo of New Mexico with their small and ancient irrigation projects. Sanitation in their villages has been improved in some instances by the installation of domestic water supply, drainage and sewage systems.

FORESTRY.

The signing of the armistice with Germany brought an abrupt close to the preparations for the production of airplane material on a large scale on the Quinaielt and Siletz Indian Reservations. The discharge of men in engineer units in America and the return of men from overseas in the early months of 1919, has facilitated a gradual reorganization of the forestry branch of the service. The great increase in salaries in private employment has made it difficult to obtain and hold competent men. However, plans have been perfected for effective timber cutting operations, and in the spring of 1920 the work on valuation surveys will be resumed.

No extensive timber cruising was undertaken during the year. A small party made a careful examination of the timber on allotments of the Siletz Reservation in order to determine the best methods of selling the timber. The scattered location of the allotments on that reservation and the release of government control over many allotments has made it difficult to effect advantageous timber sales. Conditions are not favorable for an offering of timber at this time, but the service is now in possession of the information required for future offerings. Throughout the year a cruiser was engaged in a valuation of the timber and land of public land allotments under the jurisdiction of the Greenville Indian School in

northern California. This examination established the fact that there had been trespass on a number of these allotments, and afforded the service a basis for the settlement of the trespass claims and the sale of a large number of allotments on advantageous terms.

The larger timber sales of the year were the eastern division unit on the Tulalip Reservation consisting of 65,000,000 feet, the Omak unit of 25,000,000 feet on the Colville Reservation, the Stinking Lake unit of 25,000,000 on the Jicarilla Reservation, and the Northern Spring Creek unit of 26,000,000 on the Klamath Reservation. A sale of 6,000,000 feet known as the Big Bend unit on the Klamath was made late in the year, and the Camas Creek unit of 24,000,000 feet on the Flathead Reservation was advertised for the receipt of bids on July 15, 1919. Minor sales of allotted timber were made on the Coeur d'Alene, Flathead, Fort Lapwai, Leech Lake, Nett Lake, and Skokomish Reservations. Extensive lumbering operations were conducted under former sales on the Bad River, Flathead, Jicarilla, Klamath, L'Anse, and Lac Courte Oreille Reservations. On the Winchester unit on the Nez Perce Reservation which was sold in June, 1918, operations were begun within four months. The Apache Lumber Co. has been engaged in erecting a large mill within the area purchased by it on the Fort Apache Reservation in 1917. The railroad from Holbrook, Ariz., to the mill location has been completed, and it is expected that the mill will begin operation on a large scale in the autumn of 1919. Preparations have been made by the Deer Park Lumber Co. to begin cutting in the autumn of 1919 on the large Chamokane unit on the Spokane Reservation purchased by it in July, 1918. Logging operations have been conducted during the year on the Ford unit on the Spokane Reservation. Approximately 30,000,000 feet have been cut under the contract of the International Lumber Co. on the Red Lake Reservation, practically all of which was within the area that was severely burned in the spring of 1917. Only about 500,000 feet of the timber burned on the point between the Red Lakes in 1917 remain uncut, the timber most injured by fire having been cut during the logging season of 1917-18 and 1918-19, and delivered to the agency sawmill for manufacture. Detailed information as to the amount of timber cut on each reservation will be found in the forestry portion of the statistical appendix to this report.

ROAD AND BRIDGE WORK.

Good roads in the industrial welfare and progress of the Indians are of equal importance as among the whites. A more intelligent and comprehensive system of laying out and maintaining highways on the reservations is being developed under the Congressional appropriations available for this purpose, and as the Indians are more

and more appreciating these essentials of modern economical development, greater progress is anticipated.

Specific appropriations by Congress for road and bridge work were available during the year as follows:

Roads:

Arizona (Kaibab).....	\$6,715
California (Hoopa Valley).....	10,000
Minnesota (Cass Lake).....	4,000
New Mexico (Navajo).....	25,000
Washington (Taholah).....	22,500
Wyoming (Shoshone).....	25,000
Total.....	<u>93,215</u>

Bridges:

New Mexico (Navajo).....	4,000
North Carolina (Cherokee).....	8,000
Total.....	<u>12,000</u>

Some of these appropriations for road and bridge work are made reimbursable from tribal funds of the Indians which may hereafter be deposited in the United States Treasury, while others provide that the money shall be available only on condition that the county or State furnish a fixed part of the amount to be expended. Indian labor is largely employed for road work, with the exception of the necessary experienced supervision for which white foreman must be used.

ALLOTMENTS.

Allotment work on the Gila River Reservation in Arizona was continued. During the year ended June 30, 1919, 1,213 selections were made. These selections comprise both irrigable and nonirrigable lands. About 600 Indians are yet to be allotted on this reservation.

Two hundred and seventy allotments were made on the Umatilla Reservation in Oregon, of 80 acres each, under authority of the act of March 2, 1917 (39 Stat. L., 969-986). There are about 113 Indians yet to be allotted.

Reallotments have been made through changes in, and exchanges of, allotments under the acts of October 19, 1888 (25 Stat. L., 611-612), and March 3, 1909 (35 Stat. L., 781-784), on various reservations. It is estimated that the number approved during the year will approximate about 1,000.

ALLOTMENTS IN NATIONAL FORESTS.

Allotments were made and approved to 16 Indians in various National Forests, comprising a total of approximately 1,200 acres, under section 31 of the act of June 25, 1910 (36 Stat. L., 855-859).

PUBLIC DOMAIN ALLOTMENTS.

A total of 315 allotments were made and approved covering land on the public domain in various States. These allotments comprise an area of 46,207 acres, and were made under section 4 of the act of February 8, 1887 (24 Stat. L., 388), as amended. A list of the reservations, number of allotments approved during the year, and the number made in the field and not yet approved, will be found in Table 26.

APPRAISEMENT AND REAPPRAISEMENT OF SURPLUS RESERVATION LANDS.

During the fiscal year many applications for appraisement and reappraisement of surplus reservation areas subject to homestead disposition have been handled, under authority of the act of June 6, 1912 (37 Stat. L., 125).

EXTENSION OF TRUST PERIOD.

The period of trust was extended by order of the President on allotments made to the Iowa Indians in Kansas and Nebraska; to the Kickapoo Indians in Oklahoma; to the Indians of the Hoopa Valley Reservation in California; and to the Indians of various tribes residing on the public domain, wherein the period of trust would otherwise have expired during the calendar year 1919. The period of trust was also extended on the land patented to the Capitan Grande Band of Mission Indians in California.

SALES OF INDIAN LAND.

During the fiscal year, 970 pieces of Indian land involving an area of 115,367 acres have been sold for \$2,803,232, an average of \$25.65 per acre. This is the highest average price ever received from the sale of Indian land. The average price last year was \$22 per acre.

LEASING.

The policy of leasing surplus agricultural land on the reservations, beyond that which the Indians themselves can cultivate to advantage, was continued during the year with good results, and contributed materially to the increased food production made necessary by war time demands. Perhaps the most conspicuous achievement along this line was the practical completion of the campaign to save the water rights on the Uintah and Ouray Reservation, in Utah, inaugurated in 1915. At that time, there were approximately 80,000 acres of irrigable allotted land on that reservation, with only 250 able-bodied male Indians, 199 of whom were cultivating 7,138 acres

of land. Under the State law which Congress had made applicable, beneficial use had to be made of the water by June and July of this year, in default of which the right to use it would be lost to the Indians. Without water the land is practically worthless, but under irrigation it is immensely productive. As it was a physical impossibility for the Indians themselves to bring all this land under cultivation and thus save the water rights thereto, it was decided to supplement their efforts by leasing the surplus land to outsiders on liberal terms, the primary consideration being beneficial use of the water in the production of crops. One of our best field men was placed in charge of the reservation, and under his direction the campaign has been pursued aggressively until the present time, with the result that practically all the available land for which water could be supplied has been placed in cultivation and the water rights saved to the Indians.

FIVE CIVILIZED TRIBES.

During the fiscal year ended June 30, 1919, the business transactions of the Five Civilized Tribes involved the handling of a total sum of \$32,486,805.55.

To date of June 30, 1919, 3,578,934.38 acres of tribal lands have been sold for \$20,376,096.27, being \$4,536,108.67 more than the appraised value and averaging \$5.69 per acre. Of this total amount 3,458,071 acres of the unallotted land in the Choctaw and Chickasaw Nations sold for \$19,775,436.08; in the Cherokee Nation 50,955 acres sold for \$172,007.19; in the Creek Nation 65,645 acres sold for \$382,211.63; in the Seminole Nation 4,263 acres sold for \$40,441.37. From October 9 to October 17, 1918, a sale of the unallotted land in the Choctaw, Chickasaw, and Creek Nations, consisting of 250 tracts with an area of 9,110.21 acres, sold for \$109,001.03, averaging \$11.96 per acre.

The coal and asphalt mineral deposits in the Choctaw and Chickasaw Nations were offered for sale at public auction to the highest bidder at McAlester, Okla., on December 11, 12, 13, and 14, 1918, and 54 tracts containing 42,103 acres sold for \$1,363,645.17, leaving 463 tracts containing 399,004 acres appraised at \$13,198,901.56. The Creek council house and square at Okmulgee, Okla., have been sold to the city of Okmulgee by the Creek Tribe for \$100,000, which has been paid in full and deed has been executed and delivered.

The estimated value of unsold tribal property in the Choctaw and Chickasaw Nations is as follows:

Tribal schools and improvements.....	\$105,000
2,280 town lots.....	45,000
Unsold land, including timber land and surface of the segregated coal and asphalt land.....	60,000
Amount uncollected from sale of coal and asphalt minerals.....	956,479
Amount uncollected from lands sold.....	3,348,446
Coal and asphalt mineral deposits.....	13,174,795
Total.....	17,689,720

The estimated value of unsold tribal property in the Creek Nation is as follows:

124 town lots, Muskogee, Tulsa and Lee.....	\$100,000
3 boarding schools, Nuyaka, Eufaula and Sapulpa.....	69,000
Unsold land.....	3,200
Total.....	172,200

The estimated value of unsold tribal property in the Seminole Nation is as follows:

Emahaka Mission School, 320 acres.....	\$15,000
Mekusukey Academy, 320 acres.....	22,400
Unsold.....	1,500
Total.....	38,900

Only one tract of 10 acres of tribal land in Ottawa County, Cherokee Nation, remains unsold and was reoffered for sale on July 24, 1919.

During the fiscal year a competency commission has visited the members of the Creek Tribe of Indians at their homes to ascertain who are competent and capable of handling all business transactions affecting their allotted lands without departmental assistance. During 1919 restrictions on 57,003.28 acres of allotted land were removed, 38,606 being conditional removals and sold under supervision for \$580,728.16.

During the year there were constructed for individual Indians by the field force, houses, barns, improvements, and equipments purchased at a cost of \$338,816.78; live stock was purchased for \$87,474.65 with other miscellaneous articles to the total value of \$1,110,618.53.

The amount of money disbursed to individual Indians this year from land sales, equalization, royalties and per capita payments amounts to \$7,812,331.44, an increase of more than \$3,000,000 over the total for last year.

Special emphasis has been laid upon agriculture and stock raising putting under cultivation additional acreage, and the Indian farmer has responded even beyond expectations. As farmers, knitters, nurses, soldiers, purchasers of war securities, and sacrificers for the

common cause in the war, the Indians of the Five Civilized Tribes did their full part. They measured up to duty and danger. None did more.

Liberty loan bonds of the five issues were purchased from restricted individual Indian funds to an amount of \$10,264,000, and war saving stamps to the amount of \$832,769.20, making a grand total of \$11,096,769.20. All the bonds were registered and issued in the name of the Secretary of the Interior as trustee for the Indian named in the bond and were deposited with the United States Treasurer, Washington, D. C., for safekeeping. The largest Indian purchasers of Liberty loan bonds were Creek Indians named Jackson Barnett, who purchased \$1,096,750; Jeanetta Richard, now Barnett, who purchased \$414,250; Susan Bacon, who purchased \$357,000; Mollie Davis, who purchased \$330,000; Sandy Fox, who purchased \$325,000; and Maley Fier estate, which purchased \$313,000.

It is estimated that more than 4,000 Indians of the Five Civilized Tribes entered the military and naval service of the United States and that over 200 made the supreme sacrifice. Instances of the greatest heroism have been noted and many distinctions were conferred upon individual Indians for valiant service of which a record has been kept in the office of the superintendent for the Five Civilized Tribes. Indians in the military service, especially full bloods, have received great benefit from their experiences in the training camps and overseas. The war has been a liberal education to them, broadening their views of life and inspiring in them new ambitions and higher ideals.

REGARDING TAXATION OF LANDS PURCHASED WITH RESTRICTED FUNDS.—The United States Circuit Court of Appeals, eighth circuit, in the case of *The United States v. Law* (250 Fed., 218) held that the Secretary of the Interior could by the purchase of new lands for an allottee reimpose upon the newly acquired lands taken on the Carney-Lacher form of deed the same restrictions that were imposed on the allotted lands from which the funds arose, and that the lands so purchased were impressed with restrictions as to alienation, but the question whether such lands so purchased were exempt from taxation was not passed on by the court, leaving that question now undecided by any Federal court. However, the Supreme Court of Oklahoma in the recent case of *Ella Jones v. C. S. Whitlow*, as county treasurer of McIntosh County, Okla., in passing upon the question whether lands theretofore taxable, purchased with royalty funds, are exempt from State taxation by reason of a clause in the deed making the lands inalienable, held that such lands were not so exempt in language as follows:

Lands, theretofore taxable, purchased from private owners, with royalties accruing to a full-blood Creek Indian from her restricted allotment, are not exempt from State tax-

ation by a clause in the deeds from the grantor making the lands inalienable without the consent of the Secretary of the Interior.

Unless this decision is reversed it must follow that all lands purchased with royalty funds must bear their proportion of State, county and other taxes, the same as unrestricted lands, and the same has been held to apply to lands purchased with restricted money. The Department of Justice has been requested to direct that suit be brought in the Federal court at Muskogee, Okla., having in view a final determination of this taxation question.

TOOTIE RILEY CASE.—The Tootie Riley case, decided May 19, 1919, by the United States Supreme Court, involved the question of what interest a Cherokee born since March 4, 1906, had in the homestead allotment of the deceased ancestor under section 9 of the act of May 27, 1908 (35 Stat., 312), under which it was held that the minor child is entitled to the use of the royalties; i. e., the interest or income which may be obtained by properly investing them during a period not beyond April 26, 1931, leaving the principal, like the land, to go to the heirs in general on the termination of her special right.

EASTMAN RICHARD CASE.—The Eastman Richard case, decided June 2, 1919, by the United States Supreme Court, involved the question whether a full-blood Creek heir, the father, inherited the lands of his son, a full-blood minor, free from all restrictions, under section 9 of the act of May 27, 1908 (35 Stat., 312). The United States Supreme Court held that land covered by the lease on the allotted land of the son and inherited by the father was then and would remain restricted land until April 26, 1931, and the royalties accruing therefrom were still under the supervision of the Secretary of the Interior unless prior to that time the heir, with the approval of the proper probate court, conveyed his interests therein to another and that the authority of the Secretary to supervise the collection, care, and disbursement of the royalties, had not terminated; that the leasing of such inherited full-blood lands is subject to the supervisory authority of the Secretary during the time such lands remain restricted.

PROBATE WORK IN OKLAHOMA.

The probate organization felt the disturbance of war conditions. Three probate attorneys joined the colors, and for several months it was impossible to secure a sufficient number of stenographers. However, normal activities again prevailed following the first of the calendar year, and a large volume of business was accomplished.

Formerly when probate attorneys represented the unrestricted as well as the restricted Indians, as provided in section 6 of the act of May 27, 1908 (35 Stat. L., 312), the work was greater than could be handled with facility by the 20 officials of this class. In the Indian appropriation act of May 25, 1918, Congress reduced the number of

cases over which the probate attorneys have jurisdiction, limiting their duties to probate matters affecting restricted allottees or their heirs. The result of this legislation has been that the individual cases are receiving better and more effective attention, although it is to be regretted that the unrestricted minor and incompetent Indians can not longer receive the aid and influence of the Government.

Since July 15, 1914, the courts of Oklahoma, in so far as probate matters are concerned, have been governed by rules of procedure adopted by the justices of the supreme court of that State. Under these rules, the procedure was simple and uniform and excellent results were obtained. Their binding force had been established in the case of *Freeling v. Kight*, (152 Pac., 362). During its last session, the Oklahoma Legislature passed an act, approved April 4, 1919, abrogating these rules and authorizing and requiring each county judge to promulgate rules governing the procedure in his court. If this act goes unchallenged, and each of the 40 counties comprising the Five Civilized Tribes has a different set of rules, much confusion will result and the probate organization will have been dealt a heavy blow. It is believed that the act is unconstitutional, as under section 2, article 7, of the constitution of Oklahoma, the supreme court has a general superintending control over all inferior courts, and this control should include the authority to prescribe rules of procedure for those courts. Steps will soon be taken to test the constitutionality of the act.

Of the 232 civil actions instituted by the probate attorneys and finally determined, one case decided by the Supreme Court of Oklahoma, that of *Hickory et al. v. Campbell et al.* (182 Pac., 233), may well be mentioned as showing the character and importance of some of the litigation undertaken by them. The court held that the power conferred by Congress on the representatives of this department, in this case the probate attorney, to appeal from a judgment affecting the rights of minor allottees was superior to that conferred on a guardian, and where there was a conflict the power of the probate attorney must prevail; that an appeal bond was not necessary because not required by any act of Congress; that the district court must bear evidence as to whether or not it is to the best interest of restricted minors to sell their inherited land, and that the testimony of a minor heir approaching majority that she did not desire her interest to be sold, which was contrary to the position taken by her guardian, is worthy of consideration and should be of great weight with the court in exercising its discretion. Several vexing questions were thus disposed of, the contention of the probate attorney as to each being sustained.

Two attorneys who resigned to enter the Army were reinstated in the probate service, when mustered out, one of whom was detailed to

look after probate matters among the Choctaws of Mississippi. ~~These Indians had been enrolled in Oklahoma,~~ receiving allotments there, and had later returned to their old homes in Mississippi. The probate attorney went into every case affecting Mississippi Choctaws pending in that State, over which he had jurisdiction. Many cases were in bad condition. Guardians had failed to account for funds received in behalf of their Indian wards, some had neglected to file annual and final reports, and a few had died with no attempt having been made on the part of their administrators to make final accounting and conclude the guardianships. All of the cases were replaced in good condition, either by closing them satisfactorily where the minors had become of age, or by having new guardians appointed under sufficient bond.

The following summary will give some idea of the quantity and distinctive features of the work of the probate attorneys:

Regular cases in which attorney appeared.....	7, 024
Civil actions instituted.....	270
Amount involved in such civil actions.....	268, 638
Civil actions finally determined.....	232
Criminal actions instituted.....	13
Criminal actions finally determined.....	11
New bond filed.....	1, 724
Amount covered by such new bonds.....	739, 515
Guardian removed or discharged.....	883
Conservation of funds:	
(a) Bank deposit.....	\$746, 274
(b) Investments.....	\$360, 050
Amount saved to minors and others.....	\$537, 825
Inherited land sales.....	969
Minor allotments sales.....	212
Citations issued.....	3, 899
Quit-claim deeds obtained.....	70
Official letters and reports.....	35, 481
Conferences with allottees and others (approximately).....	44, 373
Leases drafted by probate attorneys.....	683
Other leases passed upon by probate attorneys.....	757
Appraisements secured from Government appraisers.....	1, 259

PROBATING ESTATES OF DECEASED INDIANS AND APPROVAL OF WILLS.

The probating of the estates of deceased Indians and approval of wills, under the provisions of the act of June 25, 1910 (36 Stat. L., 855), as amended by the act of February 14, 1913 (37 Stat. L., 678), for the fiscal year ending June 30, 1919, progressed satisfactorily, notwithstanding numerous separations and changes, due to stress of war, in the clerical force, both in Washington and the field. During the year 2,414 cases were finally disposed of.

One thousand eight hundred and eighty-seven of these estates were those on which trust patents had issued, 176 restricted fee patents, 51 personal property, and 97 inherited interests. A fee of \$15 is collected in each of these cases.

One hundred and eighteen will cases were received, 58 of which were approved, 17 disapproved, and 40 filed without action. Three were canceled.

Fifteen examiners of inheritance were engaged in holding hearings on 26 reservations and on the public domain.

In addition to the above, 2,914 miscellaneous cases pertaining to the probate work were disposed of and 6,009 letters written.

OSAGE OIL AND GAS LEASES.

On November 9, 1918, March 5, 1919, and June 6, 1919, there were sold at public auction at Pawhuska, Okla., certain Osage Indian lands for lease for oil-mining purposes aggregating 95,337 acres for a bonus consideration of \$10,299,900, in addition to stipulated royalties, an average of about \$101 an acre.

The lands leased for oil consisted of 160-acre tracts adjoining production and scattered tracts selected with a view of opening up new pools of oil. Leases covering these tracts are for a period of five years, and as long thereafter as oil is found in paying quantities, provided that such term shall not extend beyond the date the title to the minerals remains in the Osage Tribe. The oil leases provide for a royalty in addition to the bonus paid of 16½ per cent, except when wells on a quarter-section tract or fractional part of a quarter section are sufficient to average 100 or more barrels per well per day, the royalty on oil is 20 per cent. The royalty on gas is 16½ per cent based on a value of 18 cents per 1,000 cubic feet for gas at the well, which is equivalent to 3 cents per 1,000 cubic feet.

The Osage Reservation under which oil and gas is reserved to the tribe until 1931, unless otherwise provided for by Congress, comprises approximately 1,500,000 acres, of which 680,000 acres on the east side were leased for oil under a blanket lease authorized by Congress which expired March 16, 1916. New leases have been made, covering about 1,126,528 acres for gas, and 403,000 for oil not including about 39,000 sold for lease for oil and 319,000 acres sold for lease for gas on June 6, 1919. The oil leases aggregating about 403,000 acres are included in the lands leased for gas.

On June 30, 1919, there were 124 wells being drilled, 4,442 producing oil wells, 468 producing gas wells, and 1,930 dry and abandoned wells. The gross production of oil from July 1, 1918, to June 30, 1919, amounted to 12,138,086 barrels, of which the Osage Tribe received 2,043,458 barrels. The total receipts of the Osage Tribe from oil and gas leases during the fiscal year amounted to approxi-

mately \$11,000,000, which does not include unpaid bonus still due. The total amount accruing to the tribe from oil and gas during the year amounted to approximately \$17,000,000.

The price obtained by oil operators for oil during the past year has been \$2.25 per barrel at the well. In some instances a premium of from 5 cents to 80 cents per barrel has been paid for oil purchased by local refineries.

OIL AND GAS IN THE FIVE CIVILIZED TRIBES IN OKLAHOMA.

There were under lease for oil and gas mining purposes in the Five Civilized Tribes 717,594 acres. Leases were filed during the year covering 187,217.90 acres. Royalties on production during the year amounted to \$3,416, 805.10, and advance royalties, annual rentals, and bonus amounted to \$657,180.12, a total revenue from oil and gas leases of \$4,073,985.22. The total production on restricted land amounted to 10,180,862 barrels of oil.

During the year 493 wells were drilled, of which 307 were producing wells, 57 producing gas wells, and 129 dry holes.

METALLIFEROUS MINERALS.

Section 26 of the Indian appropriation act approved June 30, 1919 (Public, No. 3), authorizes the mining of metalliferous minerals on unallotted lands of Indian reservations within the States of Arizona, California, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming, under regulations to be prescribed by the Secretary of the Interior.

A draft of regulations has been prepared to put this provision into effect. In the meantime instructions have been issued to the superintendents in charge of Indian reservations not to permit anyone to go on the reservations for the purpose of prospecting.

OIL AND GAS—OUTSIDE THE FIVE CIVILIZED TRIBES AND OSAGE NATION.

Oil and gas leases on restricted Indian lands under the jurisdiction of the Kiowa Agency have been in great demand. These leases are sold at public auction to the highest and best bidder. During the fiscal year 24,449 acres were leased for a bonus consideration of \$748,145, an average of about \$31 an acre, which is unusually good for a comparatively new field. The total revenue to the Indians on the Kiowa Reservation from oil and gas during the year amounted to about \$800,000. The work of development on this reservation is progressing satisfactorily; 3 producing oil wells and 1 gas well were brought in, and 13 wells were in the course of drilling.

On June 30, 1919, there were 37,732 acres of restricted Indian land covered with oil and gas mining leases on the Otoe Reservation. Of this acreage 1,790 acres were leased during the past fiscal year. The total revenue received by the Otoe Indians from oil and gas mining leases during the period from July 1, 1918, to June 30, 1919, was \$50,589.48.

There has been considerable activity in the oil and gas mining industry on the Pawnee and Ponca Reservations, where a number of producing wells were brought in and the incomes of the Indians have been substantially increased.

QUAPAW AGENCY.

Affairs at this agency have assumed extensive proportions during the last year by reason of the unprecedented growth of the lead and zinc mining industry, the establishment of several towns and cities to accommodate the mining population, and the various enterprises that have sprung up in connection therewith. So rapid has been the development that the business of the agency for a single month now equals its annual volume in the recent past. The exact population of the mining district is unknown, but it is said that 50,000 persons located in the north half of Ottawa County between 1916 and 1918, the major portion of whom are still living therein. The heavy work of this jurisdiction has made it necessary for the superintendent to maintain a branch office at Miami, Okla., in order to supervise the mining operations, to prepare income-tax data, and to attend to the sale of lands for town-site purposes, which is now one of the most pressing matters before his office. Of very great importance also is the proposed sale for road-building purposes of the chat piles, commonly called tailings, composed of pulverized refuse rock from the mines. There are thousands of tons of this material available for roads, and the proposition of furnishing the chat for use in the construction of highways, which are being built in many of the States under joint Federal and State control, has been taken up in a preliminary way with the Department of Agriculture. This agency has developed in a brief time from a simple rural and school proposition into a great business factor controlling the largest deposit of lead and zinc known in any one place here or abroad. In fact, the Miami-Picher district probably produces over one-half of the output of the whole United States.

REIMBURSABLE FUNDS.

The use of reimbursable funds during the year has been somewhat restricted, due to the fact that only \$150,000 was appropriated. The amount available was expended to the best advantage possible for

the benefit of the Indians, in the purchase of seeds, implements, and other articles to aid them in their agricultural and other industrial pursuits.

The matter of making collections due under reimbursable agreements is being given careful attention. Where the Indian has money to his credit and is able to pay, the superintendent has authority to insist on payment, while in other cases where the account is delinquent and the Indian is without means, an extension of time is granted, additional credit being extended in some cases where it is necessary to enable the Indian to put in a crop. Collections have been good, and at several agencies the number of accounts has been reduced materially. The beneficiaries have been enabled to get a start and in many instances no longer require assistance from reimbursable funds. Forty per cent of the amount expended for individuals Indians has been repaid. The balance must not be considered delinquent as it is payable in installments which are not due. The tribal herds established from funds of this character in previous years have proven profitable, and are of themselves a guaranty of payment. It is the intention to eventually place this stock among the individual Indians, which can be done at a less price under this plan than would be possible if stock were to be purchased for them in the open market.

New regulations governing the handling of reimbursable funds were promulgated during the year, and a new system of reimbursable accounting installed. A special supervisor is now visiting the different reservations, going over reimbursable matters with the superintendents, with special reference to the use being made of these funds and their collections.

INDIVIDUAL INDIAN MONEYS.

In furtherance of the plan adopted several years ago under the "Declaration of policy" referred to in previous reports, having in view the gradual emancipation of the Indians from governmental control, the disbursement of individual Indian funds belonging to both adults and minors has been governed by more liberal principles. Competency for this purpose was determined on a less stringent basis, and if an adult Indian was reasonably competent he was given unrestricted control of his funds, which affords him experience in the management of his own affairs along practical business lines.

The funds of minors have been authorized for their own benefit, such as the development of their allotments, and medical treatment, the purchase of stock (marked with the minor's brand), special schooling, etc. In some cases upon being appointed legal guardian and furnishing sufficient bond, the minor's funds were turned over

to the parent, who thereby became responsible to the county court for its proper expenditure.

During the past fiscal year over \$10,000,000 individual Indian funds were either paid directly to the Indians or expended for their benefit, with encouraging results in most cases.

ANNUITY AND PER CAPITA PAYMENTS.

In conformity with the policy inaugurated several years ago, direct cash annuity and per capita payment during the year have been confined to those required by law to be made in this manner, in all other cases the money being deposited in bank to the credit of the participants, subject to expenditure under the individual Indian money regulations. The principal distribution during the year was that of \$200,000 among the Indians of the Uintah and Ouray jurisdiction, in Utah, from funds appropriated by Congress out of the \$3,000,000 "Ute judgment fund" on deposit in the United States Treasury to the credit of these Indians, a substantial proportion of which was used in getting water on the Indian allotments under the plan approved by the department in 1915, with the view of saving the water rights, as explained elsewhere in this report.

SEGREGATION OF TRIBAL FUNDS.

Section 28 of the act of May 25, 1918 (40 Stat. L., 591), authorized the segregation of tribal funds, under certain conditions, as follows:

That the Secretary of the Interior be, and he is hereby, authorized, under such rules and regulations as he may prescribe, to withdraw from the United States Treasury and segregate the common, or community funds of any Indian tribe which are, or may hereafter be, held in trust by the United States, and which are susceptible of segregation, so as to credit an equal share to each and every recognized member of the tribe except those whose pro rata shares have already been withdrawn under existing law. * * * *Provided, however,* That the funds of any tribe shall not be segregated until the final rolls of said tribe are complete: *And provided further,* That the foregoing shall not apply to the funds of the Five Civilized Tribes, or the Osage Tribe of Indians, in the State of Oklahoma, but the funds of such tribes and individual members thereof shall be deposited in the banks of Oklahoma or in the United States Treasury and may be secured by the deposit of United States bonds.

Particular attention is invited to the proviso, which reads:

That the funds of any tribe shall not be segregated until the final rolls of said tribe are complete.

As there was then no authority of law for closing the rolls on many of the reservations, the above proviso had the effect of nullifying the authority conferred in the main portion of the item; therefore, it was necessary to obtain legislative authority to close the rolls, before further action could be taken with respect to the segregation of tribal funds. This authority is embodied in the Indian appropria-

tion act for the fiscal year 1920 (Public, No. 3, 66th Cong.), and reads as follows:

That the Secretary of the Interior is hereby authorized, wherever in his discretion such action would be for the best interest of the Indians, to cause a final roll to be made of the membership of any Indian tribe; such rolls shall contain the ages and quantum of Indian blood, when approved by the said Secretary, are hereby declared to constitute the legal membership of the respective tribes for the purpose of segregating the tribal funds as provided in section 28 of the Indian appropriation act approved May 25, 1918 (Fortieth Statutes at Large, pp. 591 and 592), and shall be conclusive both as to ages and quantum of Indian blood: *Provided*, That the foregoing shall not apply to the Five Civilized Tribes, or to the Osage Tribe of Indians, or to the Chippewa Indians of Minnesota, or the Menominee Indians of Wisconsin.

Pursuant thereto, steps have been taken looking toward the preparation of final rolls on several of the reservations, which, when approved, will furnish the basis for the segregation of the tribal funds of the Indians residing thereon. It is also expected that this action will likewise be taken on a number of other reservations during the coming year.

INDIANS IN NEW YORK.

About 5,000 Indians, descendants of various tribes formerly comprising the Iroquois League, still remain in New York. They own seven "reservations" aggregating something over 80,000 acres, scattered from Long Island on the east to Lake Erie on the west and from the Canadian border on the north to the Pennsylvania line on the south. Unusual problems frequently arise in connection with the affairs of these people, superinduced largely by the mooted question of jurisdiction, State or Federal, over them. Heretofore the jurisdiction exercised by the State has been quite extensive. It has maintained some 33 schools for the education of Indian youth; has constructed and maintained highways through the reservations; has provided agents to supervise their internal affairs; has, in a measure, looked after their physical welfare and has endeavored to exercise limited police powers over them. Supervision by the Federal Government has been confined largely to the fulfillment of certain early treaty obligations, such as the distribution per capita of small annuities, including a few yards of gingham and sheeting. One physician located at Gowanda, N. Y., and one special agent located at Salamanca, N. Y., are the only two local Federal employees directly concerned in the administration of affairs relating to the New York Indians.

Complicated legal questions frequently arise involving land titles within these reservations and as the "title" to each reservation rests on an entirely different basis the several reservations present individual problems peculiar within themselves. Recent court decisions

have but tended to strengthen the opinion previously entertained here that the State is without power to deal with the tribal property rights of these people, particularly those relating to their land matters; Congress alone having the power to do this.

The peculiar status of these people leads but to the conclusion that they are practically the wards of both the Nation and the State. A conference was held at Syracuse, N. Y., on March 6 and 7 of this year for the purpose of considering the New York Indian problem and working out some effective solution of the various difficulties connected with their affairs. This conference was composed largely of State officials, representatives from the various Indian tribes, independent philanthropic associations, friends of the Indians, and others interested in their welfare. This resulted in a request on the governor of the State that the matter be placed before the State legislative assembly. Later that body authorized the appointment of a commission from the State to take up with Congress and departments of the Federal Government the question of jurisdiction over these Indians and the exercise of administrative control over their affairs. The commission not yet having visited this city, just what action will flow from this remains to be seen.

THE SEMINOLES OF FLORIDA.

An Indian Service field man of wide experience, whose degree of Indian blood gives him a fortunate approach to the character and needs of this isolated band, has given faithful study and labor to their interests during the year, and his work is showing encouraging results. The principal difficulty to be overcome is the inherited antagonism of the Indians toward the Government. Under a policy of sympathetic and kindly treatment, they are gradually changing and have begun to realize the good intentions of the Government, and to take advantage of the opportunities extended in their behalf.

Besides 100,000 acres set aside for them by the State, these Indians own approximately 26,000 acres of land, part of it purchased for them by the Federal Government and the remainder set aside by Executive order. A station is being established on a tract of land set aside for them by the Government, about 75 miles southeast of Fort Myers, Fla., as the nucleus of an industrial center. The Indians, who live in small bands scattered over a wide area of swampy land, will be offered day labor at reasonable wages and thus encouraged to contribute in a self-helpful way to the development of a community having demonstration and other industrial advantages. The tract is now being fenced to provide, among other purposes, an inclosure for a small herd of cattle the purchase of which is under consideration, so that whenever an Indian shows sufficient individual enterprise, he will be sold a few head of such stock on the reimbursable plan; later

it is proposed to make the same arrangement for the sale of hogs. The Indians who have hitherto been averse to educational overtures, will thus be drawn by regular association at the industrial center into frequent contact with the Government's influence and guidance, and this should awaken their confidence and lead them to accept the benefits of schooling for their children which it is desired to furnish at an early date. The health and sanitary conditions among these Indians, as elsewhere, are of primary importance in developing their industrial and economic progress, and, therefore, an exhaustive health survey among the Seminoles by one of the most experienced physicians in the service is under way with the view of working out a practical and comprehensive program for their advancement. When this shall have been accomplished the way will be opened for the effective prosecution of work for their welfare along other lines.

ALABAMA INDIANS IN TEXAS.

In conformity with the purpose announced in my last annual report of extending a helping hand to these and other "forgotten Indians," in order that they shall have greater opportunities toward civilization, Congress appropriated \$5,000 for the construction of a school building for this particular tribe, which is now in course of construction and will be completed in time for the next school year. This building will accommodate all of the children of school age in this band.

HOMELESS INDIANS IN CALIFORNIA.

The condition of Indians not on reservations in the State of California has given this office great concern during the past few years. Conflicting reports as to their health, poverty, and moral conditions have been received, and to secure dependable information concerning these conditions two inspecting officers have been detailed to make a thorough survey and study of the homeless nonreservation California Indians and their needs.

During the course of their study of conditions the inspectors are required to give specific information as follows:

1. The names of all homeless nonreservation Indians, age, marital condition, family, locality where living, tribe, degree of Indian blood, and number of children of school age in each family.
2. The land situation near each group of Indians, general character of soil, etc., and approximate selling price.
3. Attitude of whites in the neighborhood of each group of Indians, especially whether Indian children are admitted or welcomed in white schools, whether any effort is made by State and county school authorities to get these children into white schools.
4. Your opinion, and reasons therefor, as to wisdom of the Government providing schools in localities where Indians are sufficiently grouped to afford an average attend-

ance. Would such schools be practicable, or should the education of such Indian children be undertaken by the State.

5. The general health conditions of each group of Indians, sanitary modes of living, how medical attention is now obtained, and should the Government undertake to furnish such aid; if so, how, and approximate cost. Could there be cooperation on this important subject.

6. Make a numerical summary of the results of your survey, giving number of non-reservation Indians, degree of Indian blood, and number of children in each county.

When completed this survey will enable both the Indian Office and Congress to understand the needs and requirements of these Indians.

Out of the appropriation available during the fiscal year for the purchase of land for landless Indians in California homes have been purchased for certain of these Indians at an expense of approximately \$16,000. Contracts for the sale of these lands have been consummated and possession will be given at an early date.

PAPAGO LAND LITIGATION.

There is pending at this time in the Supreme Court of the District of Columbia a case which is regarded as one brought to test the validity of 16 purported quit-claim deeds attempting to convey to one Robert F. Hunter, late of Washington, D. C., a one-half undivided interest in 16 tracts of land alleged to represent the "lands and grants" of certain Papago Indian villages located in Pima County, Ariz., and now embraced in the Papago Indian Reservation created by Executive order of February 1, 1917. The lands in which the interest is attempted to be conveyed aggregate approximately 2,600-000 acres. The deeds in question purport execution in 1880 by certain Papago Indian chiefs, 10 of such deeds being recorded in 1914 and the remaining 6 in 1919. The pending action was originally brought in the Supreme Court of the District of Columbia in January, 1915, in the name of the "Pueblo of Santa Rosa," the title of the case being "The Pueblo of Santa Rosa, plaintiff, v. Franklin Knight Lane, Secretary of the Interior, and Clay Tallman, Commissioner of the General Land Office, defendants." The action is in the nature of an injunction proceeding brought for the purpose of restraining the defendants from interfering in any manner with certain "lands and grants" alleged to be owned by the purported "Pueblo" named as plaintiff. The particular tract of land set out in the bill of complaint as being the property of "The Pueblo of Santa Rosa" is identical with that described in one of the deeds mentioned above.

On April 25, 1916, the Supreme Court of the District of Columbia dismissed the action above named. Upon an appeal to the Court of Appeals of the District of Columbia, that court, without giving the Government an opportunity to answer the original bill of complaint, handed down an opinion on April 27, 1917, reversing the action of

the court below and entered an order restraining the Government officers named as defendants from interfering with the property rights of the plaintiff. Upon appeal to the Supreme Court of the United States that court handed down an opinion on March 3, 1919, reversing the decrees of both courts below and remanding the case to the court of the first instance with directions to afford the defendants an opportunity to answer the original bill of complaint. The case having been reinstated on the docket of the Supreme Court of the District of Columbia, the Government filed its answer on June 7, 1919, and the case now awaits hearing in that court.

It is the contention of the Government in its answer that this suit was brought without the knowledge or consent of the Papago Indians; that it was brought by attorneys representing Robert M. Martin of Los Angeles, Calif., who, in 1911, purchased a three-fourths interest from Robert F. Hunter in what rights may be held by him in 10 of the 16 deeds to Indian land mentioned; that said Martin represents interests antagonistic to the Papago Indians.

In this suit is involved questions of title to practically all the land embraced within the limits of the present Papago Indian Reservation, and its successful prosecution is of vital interest to the Papago of that country. For this reason a special supervisor of this office has for the past year been engaged in a thorough investigation of the entire situation and in assisting the Department of Justice.

LEGISLATION.

Congress passed the Indian appropriation act on June 30, 1919, appropriating \$14,575,494.94 for the usual expenses for the Indian Service. Among the items of especial interest are the following:

For the suppression of the traffic in intoxicating liquors among Indians, \$100,000.

The annual per capita cost for schools is limited to not exceed \$225 unless the attendance numbered less than 200 pupils, in which case the per capita expenditure of not to exceed \$250 may be authorized. The number of pupils in any school entitled to the per capita allowance hereby provided for shall be based upon average attendance, determined by dividing the total daily attendance by the number of days the school is in session.

The sum of \$50,000 is appropriated for improving springs, drilling wells, and otherwise developing and conserving water for the use of stock, and for the purpose of increasing the available grazing range on unallotted lands on Indian reservations.

Authority is granted to cause a final roll to be made of the membership of any Indian tribe, such rolls, when approved, to constitute the legal membership of the respective tribes.

All of the provisions of the act for the relief of Indians occupying railroad lands in Arizona, New Mexico, or California, approved March 4, 1913 (37 Stat. L., 1007), as extended by the act of April 11, 1916 (39 Stat. L., 48), are extended for a period of one year from and after the 4th day of March, 1919.

Where restricted Indians are in possession or control of live stock purchased for or issued to them by the Government, or the increase therefrom, such stock shall not be sold, transferred, mortgaged, or otherwise disposed of, except with the consent in writing of the superintendent or other officer in charge of the tribe to which the owner or possessor of the live stock belongs, and all transactions in violation of this provision shall be void.

Twenty thousand dollars is appropriated for relief of distress among the Seminole Indians in Florida.

Sixty thousand dollars is appropriated from the tribal funds of the Chippewa Indians of Minnesota, to be expended in the erection or purchase of homes for Chippewa Indians whose homes were destroyed by forest fires.

Twenty thousand dollars is appropriated from the tribal funds of the Chippewa Indians of Minnesota to be expended for the construction and repair of roads on the Chippewa and ceded Indian reservations in the State of Minnesota.

Ten thousand dollars is appropriated from the funds on deposit to the credit of the Red Lake Band of Indians in the State of Minnesota, to be expended in the construction of roads and bridges on the Red Lake Reservation.

Sixty thousand dollars is appropriated for the purpose of paying the amounts assessed against tribal and allotted lands of the Indian reservations of Minnesota on account of benefit accruing to said lands by reason of the construction of a drainage ditch or ditches under the laws of Minnesota.

Three hundred and seventy five thousand dollars is appropriated for the Flathead irrigation project; \$100,000 is appropriated for the Fort Peck irrigation project, and \$50,000 is appropriated for the Blackfeet irrigation project, all in Montana.

The act of March 1, 1907 (34 Stat. L., 1015-1035), as relates to the disposal of surplus unallotted lands within the Blackfeet Indian Reservation in Montana, is repealed and authority is granted to make allotments under existing laws within the said Blackfeet Reservation to any Indians of said tribe not heretofore allotted, living six months after the approval of this act and thereafter to prorate all unallotted and otherwise unreserved lands among the Indians who have been allotted or may be entitled to rights within said reservation.

Twenty five thousand dollars is appropriated for road and bridge construction on the Mescalero Reservation in New Mexico.

Thirty-five thousand dollars is authorized for expenses in connection with oil and gas production in the Osage Reservation, Okla.

A per capita payment not to exceed \$200 to the Choctaw and Chickasaw Tribes of Indians of Oklahoma is provided for.

The unsold and forfeited tracts of coal and asphalt deposits in the Choctaw and Chickasaw Nations are to be reoffered for sale between September 15, 1919, and November 15, 1919.

Claims against the Creek and Seminole Nations, including claims to unpaid per capita and equalization money, must be filed not later than one year from June 30, 1919.

A per capita payment of not to exceed \$25 to the Rosebud Sioux Indians is authorized and \$25,000 of the tribal funds of the Rosebud Sioux Indians is authorized for the purchase of cattle.

The sum of \$12,000 is authorized to aid the public schools in Uintah and Duchesne Counties, Utah.

The sum of \$500,000 is appropriated for the Wapato irrigation project, Yakima Reservation, Wash.

The sum of \$75,000 is appropriated for beginning the construction of the irrigation system on Indian land adjacent to Toppenish and Simcoe Creeks, Yakima Reservation, Wash.

The sum of \$2,509,895 is appropriated from the trust funds of the several tribes for their support and civilization.

Authority is granted for the leasing of certain portions of Indian reservations for the mining of metalliferous minerals.

Hereafter no public lands of the United States shall be withdrawn by Executive order, proclamation, or otherwise, for or as an Indian reservation except by act of Congress.

COURT DECISIONS.

There were a number of decisions affecting Indian matters, rendered by the Supreme Court of the United States the past year. Some of the most important were:

Gabe E. Parker v. Tootie Riley, a minor, et al.—Where an allottee, a full-blood Creek Indian, died November, 1908, leaving a husband and two children, one of the children born after March 4, 1906, in the settlement of conflicting claims of the heirs to royalties collected and accruing under an oil and gas lease for her homestead, this question arose:

Did the approval of the oil and gas lease by the Secretary remove the restrictions and thereby immediately vest the royalties accruing under the lease in the heirs, or were the royalties to be held under Departmental supervision, for the benefit of the minor born subse-

quently to March 4, 1906, under section 9 of the act of May 27, 1908, until 1931, the end of the restriction period. Court held restrictions not removed, but that the royalties descended to the heirs in the same manner as the homestead and that the minor born subsequently to March 4, 1906, was entitled for her support to the exclusive use of the entire homestead until April 26, 1931; that is to say, the interest or income which might be obtained by properly investing same during said period, namely, until April 26, 1931, leaving the principal, like the homestead, to go to the heirs at the end of that time.

United States v. Suda Reynolds.—The question presented was, whether the trust period began to run from the date of the approval of the schedule of allotment or from the date of the trust patent. The court, speaking through Justice Pitney, said, "While the matter is not free from doubt, we have reached the conclusion that by the better construction the period begins and dates from the issuance of the patent and not from the approval of the schedule."

Seufert Bros. v. U. S. Trustee et al.—The question at issue was whether the treaty of June 9, 1855, with the Yakima Tribe of Indians, ceding to the United States lands occupied by them on the north side of the Columbia River, in the Territory of Washington, and reserving to the Indians the right of taking fish at all usual and accustomed fishing places in common with citizens of the Territory, gave them the right to fish in the country of another tribe on the south or Oregon side of the river.

Held that, they had the right to fish in common with citizens of the United States at the usual and accustomed fishing places on the south bank or shore of the Columbia River.

Kenny v. Miles.—The court held that where an Osage Indian died, without the restrictions having been removed from his lands, a partition by the heirs (where the heirs were Indians) was of no effect until approved by the Secretary of the Interior.

PURCHASE AND TRANSPORTATION OF SUPPLIES.

Purchases covered about the same line of goods as heretofore, the usual standard of quality being maintained with a lessening in quantity in some directions in an effort to economize to offset the steadily increasing cost. Particular care was exercised, however, to see that food supplies, clothing, fuel, and other necessities were amply provided. In some classes of goods, particularly where production was below normal or the tonnage exported large, it was rather difficult at times to obtain the necessary quantities. However, practically all of our requirements ultimately were filled. As long as the regulations of the United States Food and Fuel Administrations, together with those of the War Industries Board and other controlling

organizations were in effect, they were strictly complied with in the Indian Service. Since the creation in the War Department of the director of sales office, the Indian Office has closely cooperated with it through its surplus property division. For a short time after the cessation of war activities, there seemed to be a lessening demand on the outside for certain lines of supplies, which had a tendency to increase the interest in Government business, including our own, but this covered only a short period, after which the reverse applied. As a result, competition was not as keen as we would have liked it to be. Prices generally have been high, but it is believed those obtained compared favorably with purchases made elsewhere under similar conditions. The service has not felt any serious effects during the year through car shortage or freight congestion. Supplies moved regularly and in good order. Where in the very few instances it was necessary to take special measures to secure equipment, the United States Railroad Administration aided us promptly and in every way practicable. An energetic effort was put forth during the year to use up all surplus property in the service, and as a result considerable saving was made.

THE INDIAN EXHIBIT AT THE INTERIOR DEPARTMENT EXPOSITION.

The Indian exhibit at the Interior Department Exposition held in this city May 19-31, 1919, consisted of enlarged photographs showing the educational and industrial progress of the Indians; how they helped to win the war by service in the Army and Navy, the purchase of Liberty bonds, Red Cross work, and food production. Specimens of native Indian handicraft, such as beadwork, hand embroidered garments, artistic designs in laces and bags and various similar articles made by Indian pupils were shown; also canned and preserved fruits and vegetables, and many interesting products of the domestic science and art classes and the mechanic art shops of the Indian schools.

CONCLUSION.

The purpose underlying the creation of this bureau is the preparation of Indians by education along industrial, moral, and civic lines for assuming the duties, responsibilities, and privileges of American citizens. This year's record shows a notable advance toward the accomplishment of this object.

Your continuous sympathetic cooperation is much appreciated.

Very respectfully,

CATO SELLS,
Commissioner.

The SECRETARY OF THE INTERIOR.

STATISTICAL TABLES.¹

TABLE 1.—*Comparative statement of work and force in Office of Indian Affairs since 1899.*

Year.	Work.		Employees.	
	Communica- tions received.	Increase (+) or decrease (-) over preced- ing year.	Total number em- ployed in Indian Office.	Increase (+) or decrease (-) over preced- ing year.
		<i>Per cent.</i>		<i>Per cent.</i>
1899.....	59,707		101	
1900.....	62,601	+ 4.84	115	+13.86
1901.....	67,376	+ 7.62	119	+ 3.48
1902.....	79,237	+17.60	132	+10.92
1903.....	79,115	+ .22	131	- .76
1904.....	86,588	+ 9.03	142	+ 8.39
1905.....	98,322	+13.55	149	+ 4.93
1906.....	106,533	+ 8.35	145	- 2.68
1907.....	117,556	+10.34	160	+10.34
1908.....	152,986	+30.14	179	+11.87
1909.....	176,765	+15.53	189	+ 5.58
1910.....	194,241	+ 9.88	203	+ 7.40
1911.....	197,637	+ 1.74	227	+11.82
1912.....	222,187	+12.37	224	- 1.32
1913.....	275,462	+23.97	237	+ 5.80
1914.....	280,744	+ 1.92	245	+ 3.37
1915.....	296,240	+ 6.23	260	+ 6.12
1916.....	264,195	- 1.70	260	.....
1917.....	281,618	- .91	262	+ .77
1918.....	242,938	-13.73	260	- .76
1919.....	247,675	+ 1.95	260	.....

Per cent.

Increase in work, 1919, over 1899.....	314.82
Increase in force, 1919, over 1899.....	157.43

TABLE 2.—*Indian population of the United States, exclusive of Alaska, June 30, 1919.*

[Figures compiled from reports of Indian school superintendents, supplemented by information from 1910 census for localities in which no Indian Office representative is located.]

Grand total.....	333,702
Five Civilized Tribes, including freedmen and intermarried whites.....	101,506
By blood.....	75,519
By intermarriage.....	2,582
Freedmen.....	23,405
Exclusive of Five Civilized Tribes.....	232,196

¹ Exclusive of Five Civilized Tribes in Oklahoma and scattered Indians under Government jurisdiction except where indicated.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1919—Continued.

INDIAN POPULATION BY STATES AND TERRITORIES.

Alabama.....	909	Montana.....	12, 138
Arizona.....	42, 346	Nebraska.....	2, 448
Arkansas.....	460	Nevada.....	5, 840
California.....	16, 215	New Hampshire.....	34
Colorado.....	821	New Jersey.....	168
Connecticut.....	152	New Mexico.....	20, 581
Delaware.....	5	New York.....	6, 460
District of Columbia.....	68	North Carolina.....	8, 235
Florida.....	573	North Dakota.....	8, 891
Georgia.....	95	Ohio.....	127
Idaho.....	4, 066	Oklahoma.....	¹ 119, 101
Illinois.....	188	Oregon.....	6, 607
Indiana.....	279	Rhode Island.....	284
Iowa.....	358	South Carolina.....	331
Kansas.....	1, 441	South Dakota.....	22, 829
Kentucky.....	234	Tennessee.....	216
Louisiana.....	780	Texas.....	702
Maine.....	892	Utah.....	3, 048
Maryland.....	55	Vermont.....	26
Massachusetts.....	688	Virginia.....	539
Michigan.....	7, 512	Washington.....	10, 988
Minnesota.....	12, 447	West Virginia.....	36
Mississippi.....	1, 253	Wisconsin.....	10, 211
Missouri.....	313	Wyoming.....	1, 712

States, superintendences and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
Total population ²	323, 702	³ 105, 108	³ 104, 225	³ 96, 651	³ 112, 682	164, 783	46, 170	76, 481
Alabama: Not under agent.....	4 909							
Arizona.....	42, 346	20, 895	21, 451	20, 995	21, 351	42, 021	262	63
Camp Verde School—Mohave Apache.....	436	226	210	169	267	419	17	
Colorado River Agency—Mohave-Chemahuevi.....	1, 141	629	512	413	728	1, 061	13	63
Fort Apache School—White Mountain Apache.....	2, 466	1, 214	1, 252	1, 223	1, 243	2, 358	108	
Havasupai School—Havasupai.....	176	97	79	76	100	176		
Kaibab Agency—Kaibab Paiute.....	105	57	48	47	58	105		
Leupp School—Navaho.....	1, 441	704	737	776	665	1, 441		
Moqui School.....	4, 000	2, 085	1, 915	1, 886	2, 114	4, 000		
Moqui (Hopi).....	2, 158	1, 143	1, 015	986	1, 172	2, 158		
Navaho.....	1, 842	942	900	900	942	1, 842		
Navajo School—Navaho.....	11, 280	5, 365	5, 915	6, 595	4, 685	11, 189	90	1
Pima School.....	6, 260	3, 081	3, 179	3, 000	3, 260	6, 260		
Maricopa (Gila River).....	276	134	142	136	140	276		
Pima (Gila River).....	4, 224	2, 080	2, 144	2, 017	2, 207	4, 224		
Gila Bend Reservation—Papago.....	1, 760	867	893	847	913	1, 760		
Salt River School.....	1, 274	670	604	560	714	1, 274		
Maricopa.....	96	46	50	41	55	96		
Mohave-Apache.....	231	126	105	80	151	231		
Pima.....	947	498	449	439	508	947		

¹ Includes 23, 405 freedmen and 2, 582 intermarried whites.² Correct as reported by superintendents.³ Exclusive of Five Civilized Tribes, and Indians not under agent.⁴ 1910 census.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1919—Continued.

States, superintendencies and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
Arizona—Continued.								
San Carlos School.....	2,515	1,322	1,193	1,180	1,365	2,495	20	.....
Apache.....	2,441	1,284	1,157	1,119	1,322	2,421	20	.....
Mohave.....	74	38	36	81	43	74	.....	.....
Sells (San Xavier) School—Papago	4,485	2,312	2,153	2,153	2,312	4,485	.....	.....
Truxton Canon School—Walapai	427	213	214	176	251	418	9	.....
Western Navajo School.....	6,360	2,920	3,440	2,771	3,589	6,360	.....	.....
Moqui (Hopi).....	270	147	123	182	118	270	.....	.....
Navaho.....	5,915	2,780	3,215	2,545	3,370	5,915	.....	.....
Paiute.....	175	73	102	74	101	175	.....	.....
Arkansas: Not under agent.....	1,490	.....	.....	.....	.....	.....	.....	.....
California.....	16,215	8,219	7,996	5,875	10,640	11,172	3,295	1,748
Bishop School.....	1,518	725	793	372	1,146	1,223	187	108
Mocache.....	50	30	20	.....	.....	.....	.....	.....
Paiute.....	1,378	645	733	372	1,146	1,223	187	108
Shoshoni.....	90	50	40	.....	.....	.....	.....	.....
Campo School.....	229	115	114	80	149	203	25	1
Mission Indians at Campo...	139	79	60	49	90	127	12	.....
Cuyapaipe.....	10	4	6	1	9	10	.....	.....
Leguna.....	4	2	2	1	3	3	1	.....
La Posta.....	10	3	7	4	6	9	1	.....
Manzanita.....	66	27	39	25	41	54	11	1
Digger Agency—Digger.....	280	143	137	95	185	40	280	10
Fort Bidwell School.....	719	329	380	237	482	707	8	4
Digger.....	5	3	2	2	3	2	.....	3
Paiute.....	206	119	87	92	114	206	.....	1
Pit River.....	598	217	291	143	365	500	8	.....
Fort Yuma School.....	968	519	449	387	581	923	31	4
Cocopah.....	140	74	66	67	73	140	.....	.....
Yuma.....	828	445	383	320	508	793	31	4
Greenville School.....	2,924	1,488	1,436	1,027	1,897	1,456	376	1,098
Coneow, Digger and Washo	693	369	324	277	416	340	171	182
Redding District—various	2,231	1,119	1,112	750	1,481	1,115	205	911
tribes.....	.....	.....	.....	.....	.....	.....	.....	.....
Hoopa Valley School.....	1,712	849	863	719	993	1,663	555	95
Bear River.....	28	19	9	14	14	20	8	.....
Eel River.....	118	62	56	55	63	98	20	.....
Crescent City.....	141	74	67	52	89	104	40	.....
Hupa.....	507	283	224	223	284	230	254	29
Klamath.....	578	288	290	296	342	370	308	.....
Lower Klamath.....	340	153	187	139	201	243	25	72
Malki School.....	623	344	284	226	402	510	32	86
Mission Indians at Augus-	22	13	9	6	16	21	.....	1
time.....	29	16	13	7	22	28	.....	1
Cabezon.....	122	74	48	38	84	115	2	5
Martinez.....	9	7	2	4	5	9	.....	.....
Mission Creek.....	245	132	114	106	140	137	20	79
Morongo.....	50	26	24	10	40	50	.....	.....
Palm Springs.....	57	28	29	14	43	57	.....	.....
San Manuel.....	93	48	45	41	52	93	.....	.....
Torres.....	.....	.....	.....	.....	.....	.....	.....	.....

1 1910 census.

2 Estimated.

TABLE 2.—*Indian population of the United States, exclusive of Alaska, June 30, 1919—Continued.*

States, superintendencies and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
California—Continued.								
Pala School.....	1,064	537	517	373	681	884	160	10
Mission Indians at Pala.....	206	99	109	75	133	161	37	10
Capitan Grande.....	143	77	66	60	83	126	17	.....
La Jolla.....	240	130	110	90	150	234	6	.....
Pauma.....	57	25	32	20	37	56	1	.....
Pechanga.....	216	109	107	55	161	176	40	.....
Rincon.....	141	71	70	49	92	89	52	.....
San Pasqual.....	4	1	3	2	2	1	3	.....
Syquan.....	45	25	20	22	23	41	4	.....
Round Valley School—Concow, Ukie and others.....	1,842	931	911	796	1,046	1,660	1,042	1 140
Soboba School.....	896	494	402	313	583	664	185	47
Mission Indians at Soboba.....	126	67	59	37	89	111	15	.....
Cahuilla.....	124	64	60	34	90	117	7	.....
Inaja.....	35	18	17	12	23	35	.....	.....
Los Coyotes.....	110	66	44	41	69	110	.....	.....
Mesa Grande.....	195	111	84	79	116	96	53	46
Santa Rosa.....	60	35	25	10	50	60	.....	.....
Santa Ynez.....	71	37	34	24	47	3	68	.....
Volcan.....	175	96	79	76	99	132	42	1
Tule River School.....	445	235	210	200	245	431	14	.....
Tule River.....	158	83	65	200	245	431	14	.....
Anberry.....	151	76	75					
Burrough.....	136	66	70					
Scattered tribes—Digger—under special agent, Reno, Nev.....	1 3,000	1,500	1,500	750	2,250	2,400	450	150
Colorado.....	821	427	394	409	412	803	.....	18
Southern Ute School—Capote and Moache Ute.....	341	166	175	154	187	323	.....	18
Ute Mountain School—Capote and Moache Ute.....	480	261	219	255	225	480	.....	.....
Connecticut: Not under agent.....	2 152	.....	.....	.....	.....	.....	.....	.....
Delaware: Not under agent.....	2 5	.....	.....	.....	.....	.....	.....	.....
District of Columbia: Not under agent.....	2 68	.....	.....	.....	.....	.....	.....	.....
Florida: Seminole.....	573	334	239	260	313	557	3	13
Georgia: Not under agent.....	2 95	.....	.....	.....	.....	.....	.....	.....
Idaho.....	4,066	2,024	2,042	1,532	2,534	3,206	500	360
Coeur d'Alene School.....	818	402	416	314	504	626	97	95
Coeur d'Alene.....	610	300	310	238	372	418	97	95
Kalispel.....	82	44	38	33	49	82	.....	.....
Kootenai.....	126	58	68	43	83	126	.....	.....
Fort Hall School.....	1,759	895	864	639	1,120	1,495	208	56
Bannock.....	247	191	156	619	1,091	1,446	208	56
Shoshoni.....	1,363	680	683					
Skull Valley.....	49	24	25	20	29	49	.....	.....
Fort Lapwal School: Nez Perce.....	1,489	727	762	579	910	1,085	195	209
Illinois: Not under agent.....	2 188	.....	.....	.....	.....	.....	.....	.....
Indiana: Not under agent—Miami and others.....	2 279	.....	.....	.....	.....	.....	.....	.....
Iowa: Sac and Fox School—Sac and Fox.....	358	189	169	124	234	358	.....	.....

¹ Estimated.² 1910 Census.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1919—Continued.

States, superintendencies and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
Kansas.....	1,441	750	691	779	662	718	349	374
Kickapoo School.....	660	336	324	358	302	203	211	246
Iowa.....	335	166	169	186	149	12	77	246
Kickapoo.....	236	125	111	134	102	180	56	
Sac and Fox.....	89	45	44	38	51	11	78	
Potawatomi Agency—Prairie Band of Potawatomi.....	781	414	367	421	360	515	138	128
Kentucky: Not under agent.....	1 234							
Louisiana: Not under agent.....	1 780							
Maine: Not under agent.....	1 892							
Maryland: Not under agent.....	1 55							
Massachusetts: Not under agent.....	1 688							
Michigan.....	7,512	563	532	514	581	155	445	495
Mackinac Agency—L'Anse, Vieux Desert, and Ontonagon Bands of Chippewa.....	1,095	563	532	514	581	155	445	495
Not under agent—Scattered Chippewa, Ottawa, Potawatomi and others.....	6,417							
Minnesota.....	12,447	6,209	6,238	6,448	5,999	4,034	4,579	3,834
Fond du Lac School—Chippewa.....	1,074	557	517	545	529	77	565	432
Grand Portage School—Chippewa.....	340	143	197	157	183	8	146	186
Leech Lake School.....	1,738	889	849	748	990	968	691	79
Cass and Winibigoshish.....	493	269	224					
Leech Lake.....	773	387	386	748	990	968	691	79
White Oak Point (Miss.) Chippewa.....	472	233	239					
Nett Lake School—Chippewa (Bois Fort).....	590	277	313	287	303	355	170	65
Pipestone School.....	407	215	192	192	215	199	151	57
Mdewakanton Sioux.....	303	161	142	140	163	192	89	22
Birch Cooley—Sioux.....	104	54	50	52	52	7	62	35
Red Lake School—Red Lake Chippewa.....	1,504	757	747	784	720	752	376	376
White Earth School.....	6,794	3,371	3,423	3,735	3,059	1,675	2,480	2,639
White Earth (Miss.) Chippewa.....	2,680	1,328	1,352					
Mille Lac (removal).....	1,273	609	664					
Otter Tail Pillager.....	881	439	442					
Gull Lake (Miss.).....	459	227	232					
Mille Lac (nonremoval).....	283	138	145					
Pembina—Pillager.....	451	245	206	3,735	3,059	1,675	2,480	2,639
Leech Lake Pillager.....	284	131	153					
White Oak Point (Miss.).....	305	149	156					
Fond du Lac (removal).....	114	68	46					
Cass and Winibigoshish.....	64	37	27					
Mississippi: Not under agent.....	1 1,253							
Missouri: Not under agent.....	1 313							
Montana.....	12,138	6,204	5,934	5,733	6,405	6,427	3,071	2,640
Blackfeet School—Blackfeet.....	2,883	1,468	1,415	1,481	1,402	1,182	1,155	546
Crow Agency—Crow.....	1,707	860	847	774	933	1,232	270	205
Flathead School—Confederated Flathead.....	2,452	1,250	1,202	1,040	1,412	623	518	1,308

¹ 1910 census.

² Estimated.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1919—Continued.

States, superintendencies and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
Montana—Continued.								
Fort Belknap School.....	1,198	641	557	599	599	786	329	83
Assiniboin.....	628	340	288	599	599	786	329	83
Grosventre.....	570	301	269					
Fort Peck School.....	2,031	1,049	982	1,021	1,010	1,053	537	441
Assiniboin.....	1,259	659	600	1,021	1,010	1,053	537	441
Yankton.....	772	390	382					
Rocky Boy's Agency—Rocky Boy Band.....	451	233	218	207	244	259	192	.....
Tongue River School—Northern Cheyenne.....	1,416	703	713	611	805	1,239	70	57
Nebraska.....	2,448	1,297	1,151	1,205	1,243	1,946	200	302
Omaha School—Omaha.....	1,390	719	661	702	678	1,072	95	213
Winnebago School—Winnebago.....	1,068	578	490	503	565	874	105	89
Nevada.....	5,840	2,931	2,909	1,767	4,073	5,122	563	155
Fallon School.....	405	204	201	102	303	384	19	2
Palute at Fallon.....	295	153	142	67	228	286	7	2
Levelocks.....	110	51	59	35	75	98	12	.....
Fort McDermitt School—Palute.....	323	165	158	122	201	300	14	.....
Moapa River School—Palute.....	111	59	52	40	71	108	.....	3
Nevada School—Palute.....	526	243	283	190	336	522	4	.....
Walker River School.....	800	417	383	247	553	724	76	.....
Palute.....	491	251	240	247	553	724	76	.....
Palute (Mason Valley).....	309	166	143					
Western Shoshone School.....	675	343	332	316	359	675	.....	.....
Hopi.....	1	.....	1	316	359	675	.....	.....
Palute.....	283	153	135					
Shoshoni.....	396	190	196					
Reno, special agent¹.....	3,000	1,500	1,500	750	2,250	2,400	450	150
Palute.....	1,400	700	700	750	2,250	2,400	450	150
Shoshoni.....	1,000	500	500					
Washo.....	600	300	300					
New Hampshire: Not under agent.....	334	.....	.....	.....	.....	.....	.....	.....
New Jersey: Not under agent.....	1168	.....	.....	.....	.....	.....	.....	.....
New Mexico.....	20,581	10,465	10,116	10,232	10,349	20,113	382	86
Jicarilla School—Jicarilla Apache.....	603	322	271	255	348	602	1	.....
Mescalero School.....	613	299	314	265	348	580	22	11
Mescalero Apache.....	421	195	226	177	244	388	22	11
Fort Sill Apache (removal).....	192	104	88	88	104	192	.....	.....
Pueblo Bonito School—Navaho.....	2,275	1,000	1,275	1,136	1,139	2,275	.....	.....
Pueblo Day Schools.....	8,724	4,555	4,169	3,860	4,864	8,290	350	75
Navaho.....	360	172	197	143	226	369	.....	.....
Pueblo.....	8,355	4,383	3,972	3,717	4,638	7,921	359	75
San Juan School—Navaho.....	6,550	3,295	3,255	3,925	2,625	6,550	.....	.....
Zuni School—Pueblo.....	1,816	984	832	791	1,025	1,816	.....	.....

¹ Estimated; does not include 5,000 Indians, scattered tribes; see California, Greenville and scattered.² 1910 census.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1919—Continued.

States, superintendencies and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
New York.....	6,460	3,182	2,918	2,512	3,588	.....	.....	6,100
New York Agency.....	6,100	3,182	2,918	2,512	3,588	.....	.....	6,100
Cayuga.....	185	86	99	65	130	.....	.....	185
Onondaga.....	257	134	123	81	176	.....	.....	257
Ontonagon.....	560	326	234	189	371	.....	.....	560
Seneca (Allegany).....	946	494	452	415	531	.....	.....	946
Seneca (Cattaraugus).....	1,399	721	678	518	881	.....	.....	1,399
Seneca (Tonawanda).....	523	266	257	194	329	.....	.....	523
St. Regis (not a part of Six Nations).....	1,613	806	807	810	803	.....	.....	1,613
Tuscarora.....	367	204	163	115	252	.....	.....	367
Montauk.....	30	15	15	15	15	.....	.....	30
Poospatuck.....	20	10	10	10	10	.....	.....	20
Shinnecock.....	200	100	100	100	100	.....	.....	200
Not under agent.....	1360	.....	.....	.....	.....	.....	.....	.....
North Carolina.....	8,235	1,258	1,141	1,300	1,099	965	700	674
Cherokee School—Eastern Cherokee.....	2,399	1,258	1,141	1,300	1,099	965	700	674
Not under agent.....	5,836	.....	.....	.....	.....	.....	.....	.....
North Dakota.....	8,891	4,804	4,387	4,415	4,476	3,859	1,255	3,777
Fort Berthold School.....	1,178	568	588	558	618	832	310	84
Arikara.....	407	196	211	191	216	255	144	8
Grosventre.....	304	254	250	240	264	368	121	15
Mandan.....	365	138	127	127	138	209	45	11
Fort Totten School—Sisseton, Wahpeton, and Cuthead Sioux (known as Devils Lake Sioux).....	979	511	468	482	497	570	270	139
Standing Rock School—Sioux.....	3,427	1,720	1,698	1,517	1,910	2,302	675	450
Turtle Mountain School—Chippewa.....	3,309	1,676	1,633	1,868	1,451	155	.....	3,154
Ohio: Not under agent.....	127	.....	.....	.....	.....	.....	.....	.....
Oklahoma.....	119,101	6,846	6,749	6,790	6,806	34,650	15,147	45,899
Cantonment School.....	733	392	341	318	415	659	18	56
Arapaho.....	204	110	94	88	116	193	3	8
Cheyenne.....	529	282	247	230	299	466	15	48
Cheyenne and Arapaho School.....	1,205	616	589	513	602	850	141	214
Arapaho.....	498	251	237	.....	602	850	141	214
Cheyenne.....	717	365	352	513	.....	.....	.....	.....
Kiowa Agency.....	4,574	2,272	2,302	2,390	2,214	2,390	1,900	374
Apache.....	160	81	88	.....	.....	.....	.....	.....
Comanche.....	1,619	806	814	.....	.....	.....	.....	.....
Kiowa.....	1,566	799	797	2,390	2,214	2,300	1,900	374
Wichita and affiliated bands.....	1,134	568	566	.....	.....	.....	.....	.....
Apache (Geronimo's Band).....	86	49	37	.....	.....	.....	.....	.....
Osage School—Osage.....	2,154	1,111	1,043	962	1,172	780	1,374	(¹) 43
Osage School—Oto and Missouri.....	529	276	253	204	285	485	1	119
Pawnee School—Pawnee.....	727	364	363	363	364	595	13	.....
Ponca School.....	1,072	536	536	646	426	403	438	231
Kaw (Kansas).....	361	187	174	222	129	98	32	231
Ponca.....	664	326	338	391	273	266	396	.....
Tonkawa.....	47	23	24	23	24	29	8	.....
Sac and Fox School.....	678	326	352	358	320	387	149	142
Iowa.....	78	32	46	27	51	42	36	.....
Sac and Fox.....	600	294	306	331	269	345	113	142

¹ 1910 census minus 250 Montauk, Poospatuck, and Shinnecock.

² 1910 census.

³ Included with mixed, more than half.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1919—Continued.

States, superintendencies and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
Oklahoma—Continued.								
Seger School.....	742	371	371	310	432	684	58	.....
Arapaho.....	132	61	71	60	72	102	30	.....
Cheyenne.....	610	310	300	250	360	582	28	.....
Seneca.....	2,158	1,048	1,110	1,228	930	109	524	1,525
Eastern Shawnee.....	160	72	88	95	65	3	62	95
Modoc ¹	40	18	22	26	14	.....	40	(¹)
Ottawa.....	272	147	125	175	97	.....	11	261
Quapaw.....	331	161	170	186	145	74	31	226
Seneca.....	481	237	244	289	192	14	281	186
Wyandot.....	481	232	249	227	254	.....	25	456
Peoria—Miami (citizen) ²	393	181	212	230	163	18	74	301
Shawnee School.....	3,023	1,534	1,489	1,418	1,605	624	138	2,261
Absentee Shawnee.....	540	281	259	261	279	437	83	20
Citizen Potawatomi.....	2,288	1,148	1,140	1,085	1,203	187	47	2,241
Mexican Kickapoo.....	195	105	90	72	123	.....	8	.....
Total, western Oklahoma.....	17,595	8,846	8,749	8,790	8,805	7,876	4,754	4,965
Five Civilized Tribes.....	101,506	.....	.....	.....	.....	26,774	10,393	40,934
Cherokee Nation.....	41,824	.....	.....	.....	.....	8,708	4,778	23,424
By blood.....	36,432	}	}	}	}	8,703	4,778	23,424
By intermarriage.....	286							
Delawares.....	187							
Freedmen.....	4,919	.....	.....	.....	.....	.....	.....	.....
Chickasaw Nation.....	10,966	.....	.....	.....	.....	1,515	966	3,823
By blood.....	5,659	}	}	}	}	1,515	966	3,823
By intermarriage.....	645							
Freedmen.....	4,662							
Choctaw Nation.....	26,828	.....	.....	.....	.....	8,444	2,473	9,882
By blood.....	17,488	}	}	}	}	8,444	2,473	9,882
By intermarriage.....	1,651							
Mississippi Choctaw.....	1,660							
Freedmen.....	6,029	.....	.....	.....	.....	.....	.....	.....
Creek Nation.....	18,761	.....	.....	.....	.....	6,858	1,698	3,396
By blood.....	11,952	}	}	}	}	6,858	1,698	3,396
Freedmen.....	6,809							
Seminole Nation.....	3,127	.....	.....	.....	.....	1,254	478	409
By blood.....	2,141	}	}	}	}	1,254	478	409
Freedmen.....	986							
Oregon.....	6,607	3,218	3,389	2,547	4,060	3,736	1,457	1,414
Klamath School—Klamath Modoc, Paiute, and Pit River.....	1,154	560	594	520	634	818	C5	271
Roseburg ⁴.....	.....	.....	.....	.....	.....	.....	.....	.....
Siletz School.....	1,158	594	564	462	696	318	415	425
Siletz—Confederated Siletz.....	434	220	214	191	243	204	215	15
Grande Ronde—Grande Ronde.....	335	173	162	154	181	100	200	35
Fourth Section Allottees—Various tribes on public domain in western Oregon.....	389	201	188	117	272	14	.....	375
Umatilla School—Cayuse, Umatilla, and Walla Walla.....	1,167	540	627	495	672	604	65	498

¹ Included with mixed, more than half.² 1918 report.³ 1916 report.⁴ Discontinued May 15, 1918; under Greenville, Reno, Siletz, Warm Springs, and scattered.

TABLE 2.—*Indian population of the United States, exclusive of Alaska, June 20, 1919—Continued.*

States, superintendencies and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
Oregon—Continued.								
Warm Springs School.....	928	424	504	320	608	896	32	.....
Warm Springs—Wasco, Tenino, and Palute.....	822	375	447	285	537	790	32	.....
Public domain—Burns.....	73	135	138	124	149	73	.....	.....
Public domain—The Dalles.....	33	114	119	111	122	33	.....	.....
Scattered Indians formerly under Roseburg, on public domain.....	2,200	1,100	1,100	750	1,450	1,100	880	220
Rhode Island: Not under agent.....	284	.....	.....	.....	.....	.....	.....	.....
South Carolina: Not under agent—Catawba, Cherokee, Oneida, and others.....	331	.....	.....	.....	.....	.....	.....	.....
South Dakota.....	22,829	11,323	11,506	10,846	11,983	12,693	5,987	4,149
Cheyenne River School—Blackfeet, Miniconjou, Sans Arc, and Two Kettle Sioux.....	2,772	1,326	1,446	1,239	1,533	1,644	471	657
Crow Creek School—Lower Yanktonia Sioux.....	954	450	504	394	560	690	216	48
Flandreau School—Flandreau Sioux.....	283	152	131	106	177	175	100	8
Lower Brule School—Lower Brule Sioux.....	515	267	248	256	259	249	99	167
Pine Ridge School—Oglala Sioux.....	7,218	3,619	3,599	3,294	3,924	4,630	1,270	1,318
Rosebud School—Rosebud Sioux.....	5,366	2,690	2,676	2,788	2,628	3,096	1,551	1,719
Sisseton School—Sisseton and Wahpeton Sioux.....	2,304	1,182	1,122	1,126	1,178	1,704	1,200	1,400
Yankton School.....	3,417	1,637	1,780	1,693	1,724	1,505	1,080	832
Yankton Sioux.....	1,927	917	1,010	1,006	921	911	639	377
Santee Sioux.....	1,152	567	585	473	679	500	303	349
Ponca.....	338	153	185	214	124	94	138	106
Tennessee: Not under agent.....	216	.....	.....	.....	.....	.....	.....	.....
Texas: Not under agent.....	702	.....	.....	.....	.....	.....	.....	.....
Alabama and Coushatta.....	206	.....	.....	.....	.....	.....	.....	.....
Koosati, Seminole, Isleta, and others.....	496	.....	.....	.....	.....	.....	.....	.....
Utah.....	3,048	803	829	695	937	1,506	82	44
Goshute Agency.....	397	190	207	155	242	384	.....	13
Goshute.....	152	76	76	.....	.....	.....	.....	.....
Cedar City.....	31	16	15	.....	.....	.....	.....	.....
Indian Peake.....	16	7	9	.....	.....	.....	.....	.....
Kanosh.....	32	14	18	155	242	384	.....	13
Kooskarum.....	35	17	18	.....	.....	.....	.....	.....
Warm Creek.....	14	9	5	.....	.....	.....	.....	.....
Washakie.....	117	51	66	.....	.....	.....	.....	.....
Shivwits School—Paiute.....	125	58	67	53	72	125	.....	.....
Uintah and Ouray Agency.....	1,110	555	555	487	623	997	82	31
Umta Ute.....	435	210	225	.....	.....	.....	.....	.....
Uncompahgre Ute.....	406	203	203	487	623	997	82	31
White River Ute.....	269	142	127	.....	.....	.....	.....	.....
Not under agent—Paiute and others.....	1,416	.....	.....	.....	.....	.....	.....	.....
Vermont: Not under agent.....	26	.....	.....	.....	.....	.....	.....	.....
Virginia: Not under agent.....	539	.....	.....	.....	.....	.....	.....	.....
Washington.....	10,968	5,385	5,603	4,671	6,317	6,883	2,365	1,740
Colville School—Confederated Colville.....	2,518	1,243	1,275	1,101	1,417	1,398	400	660

¹ Estimated.

² 1910 census.

³ Inspector's report, 1918.

TABLE 2.—*Indian population of the United States, exclusive of Alaska, June 30, 1919—Continued.*

States, superintendencies and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							More than half.	Half or less.
Washington—Continued.								
Cushman School.....	2, 148	1, 068	1, 060	984	1, 164	1, 381	536	231
Chahalis.....	120	64	56	54	66	91	6	23
Muckleshoot.....	182	79	103	82	100	144	25	13
Nisqually.....	80	43	37	18	62	49	21	10
Skokomish.....	202	99	103	94	108	127	75	.....
Squaxon Island.....	79	46	33	36	43	70	9	.....
Unattached.....	1, 485	757	728	709	785	900	400	185
Cowlitz.....	490	240	250	1 700	1 785	1 900	1 400	1 185
Clallam.....	539	290	249					
Puyallup.....	152	75	77					
Various other Indians.....	304	152	152					
Neah Bay School.....	669	352	317	276	393	584	20	66
Hoh.....	46	25	21	15	31	46	.....	.....
Makah.....	409	216	193	187	222	336	20	53
Oaette.....	10	5	5	.....	10	10	.....	.....
Quileute.....	204	106	98	74	130	192	.....	12
Spokane School.....	617	291	326	264	353	341	75	201
Chewelah.....	11	6	5	.....	11	11	.....	.....
Spokane.....	606	285	321	264	342	330	75	201
Taholah School.....	782	377	405	310	472	353	230	199
Queets River Reservation.....	48	20	28	8	40	43	5	.....
Quileute.....	15	4	11	2	13	13	2	.....
Quinalt.....	23	16	17	6	27	30	3	.....
Quinalt Reservation: Quinalt.....	734	357	377	302	432	310	225	199
Tulalip School.....	1, 321	664	657	624	697	851	436	34
Lummi.....	516	259	257	256	260	297	204	15
Port Madison—Squamish.....	204	106	98	106	98	84	105	15
Swinomish.....	219	108	111	98	121	192	26	1
Tulalip (remnants of many tribes and bands).....	382	191	191	164	218	278	101	3
Yakima School—Confederated Yakima.....	2, 333	1, 370	1, 563	1, 112	1, 621	1, 975	606	380
West Virginia: Not under agent.....	" 36	.....	.....	.....	.....	.....	.....	.....
Wisconsin.....	10, 211	5, 215	4, 906	4, 536	5, 675	2, 668	5, 252	2, 171
Grand Rapids Agency—Potawatomi and Winnebago.....	1, 233	597	636	555	678	1, 219	9	5
Hayward School—Chippewa.....	1, 296	632	664	497	799	213	876	207
Keshena School.....	2, 339	1, 248	1, 091	1, 115	1, 224	296	897	1, 047
Menominee.....	1, 733	933	800	841	892	295	897	441
Stockbridge and Muncie *.....	606	315	291	274	332	.....	.....	1 606
Lac du Flambeau School—Chippewa.....	754	352	402	288	466	461	172	121
Leona Agency—Potawatomi.....	350	201	149	150	200	250	.....	.....
La Pointe School—Chippewa at Bad River.....	1, 052	532	520	469	613	45	302	672
Oneda School—Oneda.....	2, 630	1, 354	1, 276	1, 281	1, 399	2	2, 630	.....
Red Cliff School—Chippewa.....	527	279	248	231	296	.....	406	119
Wyoming.....	1, 712	867	845	766	946	1, 171	116	425
Shoshone Agency.....	1, 712	867	845	766	946	1, 171	116	425
Arapaho.....	851	426	425	384	467	714	68	69
Shoshoni.....	861	441	420	382	479	457	48	356

* Estimated.

* 1910 census.

* Now citizens.

TABLE 3.—*Allotted and unallotted Indians and those holding trust and fee patents, June 30, 1919.*

States and superintendencies.	Number of Indians.	Allotted.				Unal- lotted.
		Total allotted.	Holding trust or restricted fee patents.	Indians who have received patents in fee for—		
				Part of allotment.	Entire allotment.	
Total, 1919	307,174	176,237	61,506	3,381	111,350	130,937
1918	309,755	178,094	64,088	3,593	110,403	131,661
1917	309,409	179,374	67,972	3,495	107,907	130,035
1916	312,654	184,865	72,508	3,492	108,965	126,547
1915	309,911	182,289	68,980	2,623	110,696	126,379
1914	307,891	180,605	69,944	1,643	109,018	124,797
1913	300,784	170,444	65,762	1,420	103,262	121,233
1912	300,930	177,626	70,478	1,926	103,843	120,876
1911	286,326	164,215	58,182		76,063	120,780
1901	247,522	64,853				
1890	230,437	15,166				
Arizona	42,346	6,763	6,763			35,583
Camp Verde	436					436
Colorado River	1,141	1,141	1,141			
Fort Apache	2,466					2,466
Havasupai	178					178
Kalbab	105					105
Leupp	1,441					1,441
Moqui	4,009					4,009
Navajo	11,280					11,280
Pima	6,260	4,812	4,812			1,448
Salt River	1,274	725	725			549
San Carlos	2,515					2,515
Sells	4,465	85	85			4,380
Truxton Canon	427					427
Western Navajo	6,360					6,360
California	16,215	3,639	3,595	2	42	12,576
Bishop	1,518	236	229		7	1,282
Campo	299					299
Digger	280	22	22			258
Fort Bidwell	719	199	199			520
Fort Yuma	968	670	670			298
Greenville	2,924	606	593		13	2,318
Hoopa Valley	1,712	1,205	1,184		21	507
Malik	628					628
Pala	1,054	185	185			869
Round Valley	1,842	453	451	2		1,389
Soboba	896					896
Tule River	445	63	63		1	382
Scattered tribes—special agent, Reno, Nevada	3,000					3,000
Colorado	821	117			117	704
Southern Ute	341	117			117	224
Ute Mountain	480					480
Florida: Seminole	573					573
Idaho	4,066	2,718	2,421	40	257	1,348
Coeur d'Alene	818	465	357		108	353
Fort Hall	1,759	1,496	1,447		49	263
Fort Lapwai	1,489	757	617	40	100	732
Iowa: Sac and Fox	358					358
Kansas	1,441	677	494	19	164	764
Kickapoo	660	274	165	13	96	386
Potawatomi	781	403	329	6	68	378
Michigan: Mackinac	1,095	73	73			1,022

¹ Includes fee patents for part of their allotment.

TABLE 3.—*Allotted and unallotted Indians and those holding trust and fee patents, June 30, 1919—Continued.*

States and superintendencies.	Number of Indians.	Allotted.				Unal- lotted.
		Total allotted.	Holding trust or restricted fee patents.	Indians who have received patents in fee for—		
				Part of allot- ment.	Entire allot- ment.	
Minnesota.....	12,447	4,825	3,541	563	721	7,622
Pond du Lac.....	1,074	284	244	10	30	790
Grand Portage.....	340	141	85	1	55	199
Leech Lake.....	1,738	914	726	9	179	824
Nett Lake.....	590	253	196	.....	57	337
Pipestone.....	407	31	31	.....	.....	376
Red Lake.....	1,504	.....	.....	.....	.....	1,504
White Earth.....	6,794	3,202	2,259	543	400	3,592
Montana.....	12,138	7,032	5,665	143	1,224	5,106
Blackfeet.....	2,883	2,230	1,740	.....	490	653
Crow.....	1,707	1,178	1,051	4	123	529
Flathead.....	2,452	1,765	1,265	17	483	987
Fort Belknap.....	1,198	.....	.....	.....	.....	1,198
Fort Peck.....	2,031	1,859	1,609	122	128	172
Rocky Boy's Agency.....	451	.....	.....	.....	.....	451
Tongue River.....	1,416	.....	.....	.....	.....	1,416
Nebraska.....	2,448	896	365	71	460	1,552
Omaha.....	1,380	556	221	51	284	824
Winnebago.....	1,068	340	144	20	176	728
Nevada.....	5,840	1,322	1,215	.....	107	4,518
Fallon.....	405	269	269	.....	.....	136
Fort McDermitt.....	323	69	69	.....	.....	254
Moapa River.....	111	101	.....	.....	101	10
Nevada.....	526	.....	.....	.....	.....	526
Walker River.....	800	273	273	.....	.....	527
Western Shoshone.....	675	.....	.....	.....	.....	675
Reno, special agent ¹	3,000	610	604	.....	6	2,390
New Mexico.....	20,581	446	446	.....	.....	20,135
Jicarilla.....	603	446	446	.....	.....	157
Mescalero.....	613	.....	.....	.....	.....	613
Pueblo Bonito.....	2,275	.....	.....	.....	.....	2,275
Pueblo Day Schools.....	8,724	.....	.....	.....	.....	8,724
San Juan.....	6,550	.....	.....	.....	.....	6,550
Zuni.....	1,816	.....	.....	.....	.....	1,816
New York: New York Agency.....	6,100	.....	.....	.....	.....	6,100
North Carolina: Cherokee.....	2,399	.....	.....	.....	.....	2,399
North Dakota.....	8,891	7,074	5,939	264	871	1,817
Fort Berthold.....	1,176	885	818	19	48	291
Fort Totten.....	979	407	317	90	.....	572
Standing Rock.....	3,427	3,103	2,959	79	65	324
Turtle Mountain.....	3,309	2,679	1,845	76	758	630

¹ Does not include 3,000 Indians, scattered tribes in California.

TABLE 3.—*Allotted and unallotted Indians and those holding trust and fee patents, June 30, 1919—Continued.*

States and superintendencies.	Number of Indians.	Allotted.				Unal- lotted.
		Total allotted.	Holding trust or restricted fee patents.	Indians who have received patents in fee for—		
				Part of allot- ment.	Entire allot- ment.	
Oklahoma.....	116,380	110,001	6,330	888	102,783	6,379
Cantonment.....	733	338	250	10	48	395
Cheyenne and Arapaho.....	1,205	600	416	17	167	605
Five Civilized Tribes.....	101,506	101,506	(¹)	.....	101,506	.....
Kiowa.....	4,574	2,923	2,758	15	150	1,651
Osage.....	2,154	1,755	² 1,265	³ 490	.....	399
Otoe.....	529	282	233	18	31	247
Pawnee.....	727	289	127	32	130	438
Ponca.....	1,072	619	273	196	150	453
Sac and Fox.....	678	225	84	17	124	433
Sage.....	742	366	307	15	44	376
Seneca.....	⁴ 1,725	745	402	8	335	980
Shawnee.....	⁵ 735	353	185	70	98	382
Oregon.....	6,607	1,915	1,495	21	399	4,692
Klamath.....	1,154	751	652	3	96	403
Siletz.....	1,158	227	157	14	56	931
Umatilla.....	1,167	420	173	4	243	747
Warm Springs.....	928	517	513	.....	4	411
Scattered Indians, formerly under Roseburg, on public domain.....	2,200	.....	.....	.....	.....	2,200
South Dakota.....	22,491	17,050	13,694	1,289	2,067	5,441
Cheyenne River.....	2,772	2,703	2,460	76	167	60
Crow Creek.....	964	954	863	6	85	.....
Flandreau.....	283	.....	.....	.....	.....	283
Lower Brule.....	515	456	382	10	64	59
Pine Ridge.....	7,218	6,195	5,169	604	422	1,023
Rosebud.....	5,366	5,016	4,358	106	552	350
Sisseton.....	2,304	664	161	276	227	1,640
Yankton.....	1,927	772	210	197	345	1,155
Santee.....	1,152	290	91	14	185	862
Utah.....	1,632	597	590	3	4	1,035
Goshute.....	397	.....	.....	.....	.....	397
Shivwits.....	125	.....	.....	.....	.....	125
Utah and Ouray.....	1,110	597	590	3	4	513
Washington.....	10,988	6,783	6,008	67	708	4,205
Colville.....	2,518	2,423	2,158	.....	265	95
Cushman.....	2,148	159	150	3	6	1,989
Neah Bay.....	669	276	276	.....	.....	393
Spokane.....	617	465	371	2	92	152
Taholah.....	782	486	447	.....	39	296
Tulalip.....	1,321	166	152	.....	14	1,155
Yakima.....	2,933	2,808	2,454	62	292	125
Wisconsin.....	9,605	3,090	1,750	6	1,334	6,515
Grand Rapids.....	1,233	.....	.....	.....	.....	1,233
Hayward.....	1,296	509	382	.....	127	787
Keshena.....	1,733	.....	.....	.....	.....	1,733
Lac du Flambeau.....	754	352	325	.....	27	402
Lacoma.....	350	.....	.....	.....	.....	350
La Pointe.....	1,082	1,082	939	6	137	.....
Oneida.....	2,630	1,021	35	.....	986	1,609
Red Cliff.....	527	126	69	.....	57	401
Wyoming: Shoshone.....	1,712	1,219	1,122	5	92	493

¹ 22,436 restricted Indians as to alienation.² Indians who have not received certificates of competency.³ Indians who have received certificates of competency.⁴ Does not include Peoria-Miami (citizen) and Modoc Indians.⁵ Does not include citizen Potawatomi.

TABLE 4.—*Marriages, missionaries, churches, English language, dress, citizenship, crimes, misdemeanors, etc., June 30, 1919.*

States and superintendencies.	Marriages.				Crimes.		Misdemeanors.		Arrests for drunkenness.		Missionaries working among Indians.		Churches among Indians.		Church-going Indians.		Indians who—				
	Between whites and Indians.	Between Indians.	By tribal custom.	By legal procedure.	By Indians.	By whites.	By Indians.	By whites.	Indians.	Whites.	Protestant.	Catholic.	Churches among Indians.	Protestant.	Catholic.	Speak English language.	Read and write English language.	Wear citizens' clothing.	Are citizens of the United States.	Are voters.	
Total, 1919.	129	1,628	365	1,292	236	343	74	812	241	106	429	208	642	44,730	58,641	120,102	90,782	191,693	79,355	26,314	
1918.	185	1,607	379	1,414	329	284	66	924	464	929	405	222	694	43,346	57,998	116,990	76,765	192,238	79,097	25,636	
1917.	250	1,597	337	1,610	346	235	90	1,186	323	1,234	430	275	616	42,078	57,463	116,405	74,805	191,207	78,981	26,335	
1916.	176	1,717	498	1,395	421	283	157	1,094	221	1,119	399	257	617	40,810	56,961	113,484	74,972	191,201	74,092	24,084	
1915.	111	1,633	474	1,210	161	312	120	942	165	1,335	432	241	625	37,430	51,638	113,928	74,973	192,496	74,090	24,118	
1914.	168	1,892	496	1,616	154	206	229	881	512	1,261	451	292	583	36,377	48,925	104,584	66,202	173,190	80,241	24,118	
1913.	200	1,800	516	1,494	201	292	244	823	348	1,900	453	277	554	34,136	46,261	100,208	62,865	161,585	74,265	24,118	
1912.	172	2,181	779	1,544	588	266	207	1,264	327	2,057	253	189	513	29,897	39,662	90,431	54,843	149,521	78,543	24,118	
1911.	190	1,891	806	1,177	668	266	207	1,264	327	2,057	253	189	513	29,897	39,662	90,431	54,843	149,521	78,543	24,118	
1900.	190	1,891	806	1,177	668	266	207	1,264	327	2,057	253	189	513	29,897	39,662	90,431	54,843	149,521	78,543	24,118	
1890.	190	1,891	806	1,177	668	266	207	1,264	327	2,057	253	189	513	29,897	39,662	90,431	54,843	149,521	78,543	24,118	
Arizona.	362	106	256	198	105	...	202	...	23	...	61	24	64	4,754	9,863	8,170	6,503	35,523	22	22	
Camp Verde.	1	1	...	...	1	...	5	...	3	...	1	1	...	60	...	250	175	436	1	1
Colorado River.	6	...	...	...	...	...	...	...	...	...	...	...	2	120	...	570	570	1,141	...	...
Fort Apache.	16	...	...	...	1	...	...	...	4	...	2	...	...	...	...	200	200	1,842	...	...
Fort Mojave.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	158	158	...	...	...
Navasopai.	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	110	110	...	...	...
Kalab.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	81	30	105	...	...
Leupp.	35	...	...	...	2	...	...	...	...	...	...	...	3	140	...	250	150	1,300	...	...
Navajo.	12	...	...	...	15	...	13	...	...	...	13	...	6	96	...	585	500	2,100	...	...
Navaho.	110	10	100	100	16	...	30	...	1	...	7	7	11	475	900	1,300	1,200	10,000	20	20	
Phoenix.	...	...	...	...	...	...	...	...	...	...	4	5	...	...	...	...	...	...	...	...
Pima.	40	...	...	...	16	...	7	...	1	...	3	6	15	1,810	3,760	1,500	1,000	6,260	1	1
Salt River.	7	...	...	...	...	...	...	...	...	...	3	2	...	...	...	...	...	...	...	...
San Carlos.	20	...	...	...	8	...	12	...	...	...	2	2	...	...	...	...	...	...	...	...
Sells (San Xavier).	...	...	...	...	...	...	222	...	...	...	3	1	8	100	...	...	...	...	...	...
Truxton Canon.	50	...	...	...	2	...	8	...	6	...	2	3	17	100	4,800	500	500	1,500	...	...
Western Navajo.	6	...	...	...	...	...	10	...	1	...	2	...	2	82	...	350	300	3,500	...	...
	54	...	...	...	44	...	10	...	1	...	2	...	2	...	...	450	450	3,500	...	...

California.	8	136	59	85	1	12	44	52	6	24	32	39	1,889	3,787	11,313	5,344	14,110	6,835	2,251
Bishop.		16	8	8	1					1	6	1	201		1,000	500	1,518		
Campo.		1	1	1				25					(¹)		135	67	229		20
Dager.		2	2	2		3							(¹)		280	60	260	280	12
Fort Bidwell.		24	22	2			20	10	4	1			18	(¹)	600	350	719	719	
Fort Yuma.		26	15	11		2	2			2	2	2	310	300	515	515	903		
Greenville.		29	6	23				5					222	222	2,693	1,080	2,924	2,693	940
Hoop Valley.		8	8	8									70	463	1,000	600	1,712	1,000	600
Maki.		8	8	8				3		3	7	2	178	463	448	306	645	645	710
Pala.		13	15	15		2	22	4		4	2	8	6	1,021	709	467	1,060	1	29
Round Valley.		2	1	3		1		4		4			77	447	1,775	(¹)	1,842	1,842	1,620
Sherman Institute.		1	1	1				5	2	6	6	3	493	870	879	879	879		
Soboba.		1	1	1									249	158	360	425	896		
Tule River.		1	1	1				5	2	6	6	3	249	158	360	158	445		
Colorado.	2	5	3	4			3			2	1	3	50	145	430	110	741	841	
Southern Ute.	2	3	1	4			3			2	1	3	50	145	80	60	341	341	
Ute Mountain.	2	2	2												350	50	400		
Florida: Seminole.		25	25			1							1		250	20	60		
Idaho.	6	38	3	41	10	25	1	40	5	8	12	14	1,078	1,160	2,138	1,640	4,065	1,117	1,117
Coeur d'Alene.	1	4		5		12	1	12			10	3		818	458	360	818	118	118
Fort Hall.	5	13		18		6		24		6		2	399	342	550	550	1,759	49	49
Fort Lapwai.	5	21	3	18	10	7		4	5	2	2	9	679	342	1,100	700	1,498	960	650
Iowa: Sac and Fox.		7		7		2				1	(¹)	1	35		300	200	355		
Kansas.	4	13		17			1		3	3	1	5	190	280	1,075	945	1,441	1,210	599
Kickapoo.	2	3		5								3	140		630	600	660	660	252
Potawatomi.	2	10		12			1	3	3	1	1	2	50	280	445	345	781	550	347
Michigan.												9	590	918	1,282	1,092	1,487	1,095	581
Modoc.												9	405	699	890	700	1,095	1,095	581
Mount Pleasant.													103	229	392	392	392		

¹ 1918 report.
² No record.

¹ Unknown.
² Includes Redding District, public domain.
³ Partial report.

¹ Exclusive of Five Civilized Tribes.
² Estimated.
³ Includes Papago Indians.

TABLE 4.—Marriages, missionaries, churches, English language, dress, citizenship, crimes, misdemeanors, etc., June 30, 1919—Continued.

States and superintendencies.	Marriages.				Plural marriages existing June 30, 1919.	Crimes.		Misdemeanors.		Arrests for drunkenness.		Missionaries working among Indians.		Church-going Indians.	Indians who—				
	Between Indians and whites.	Between Indians.	By tribal custom.	By legal procedure.		By Indians.	By whites.	By Indians.	By whites.	Protestant.	Catholic.	Protestant.	Catholic.		Speak English language.	Read and write English language.	Wear citizens' clothing.	Are citizens of the United States.	Are voters.
Minnesota.....	2	42	5	44		2	3	8	15	10	35	1,593	3,312	7,737	5,097	12,337	10,233	2,389	
Fond du Lac.....		5		5		(1)	(1)	(1)	1	1	5	40	920	900	600	1,074	1,074	260	
Grand Portage.....	1	2		3		(1)					3	3	326	315	225	340	340	50	
Leech Lake.....		25		25		2	3	8	3	1	9	390	601	850	600	1,738	1,738	520	
Nett Lake.....	3	3		3					1	1	2	30	15	300	150	590	300	150	
Pipestone (Birch Cooley).....	1	1		2	(1)		(1)	(1)	4	4	4	80		297	297	297	1	21	
Red Lake.....		6		6					2	2	3	365	750	1,075	525	1,504			
White Earth.....		(1)				(1)	(1)	(1)	4	4	10	675	700	4,000	2,700	6,794	6,780	1,388	
Montana.....	15	86	4	97	5	77	13	76	18	13	40	1,548	6,824	6,788	4,749	10,944	942	835	
Blackfeet.....	6	26		32	3	57		5	2	2	5	450	2,100	1,500	1,300	2,771	180		
Crow.....	(1)	(1)		(1)		1	3	3	3	2	3	385	520	875	1,725	1,150	127	127	
Flathead.....	8	11		19		11	83	27	6	15	6	395	2,000	1,700	1,230	2,430	500	573	
Fort Belknap.....	12	12		12		1	4	3	2	2	3	100	900	900	600	1,108			
Fort Peck.....	20	20		20		9		32	8	2	3	475	455	1,352	680	2,031	135	135	
Rocky Boy's Agency.....	7	4		4	2	1	2	4	1	1	5	120	370	176	49	439			
Tongue River.....	1	10		11		6	1	4	4	1	1	5	120	370	285	165	925		
Nebraska.....	4	56	23	37	2	3		14	3	14	7	504	200	1,700	1,500	1,906	2,448	706	
Omaha.....	4	24	8	20	2	1		2	1	1	6	105	800	850	800	840	1,390	337	
Winnebago.....		32	15	17		2		12	3	13	7	399	200	850	700	1,066	1,066	379	
Nevada.....		24	15	9	2	4		28	4	14	11	980	200	9,325	1,610	10,840	762	540	
Fallon.....	2	2		2				80		2	1	81		405	80	405			
Fort McDermitt.....	4	4		4	1		15	1		1		150		275	100	323	349		
Mojave River.....	2	2		2				1		1				100	40	111	113		

Nevada.....	3	3	2	1	3	28	3	18	2	16	12	20	230	(1)	520	170	526	.....
Walker River.....	11	9	2	1	4	(1)	2	23	4	1	1	1	20	(1)	600	200	800	.....
Western Shoshone.....	2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	7	485	200	425	220	673	.....
Reno, special agent.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	.....	.....	7,000	8,000	300	540
New Mexico.....	4	110	58	1	5	.....	.....	.....	.....	.....	.....	988	7,875	6,932	5,360	15,388	1,805	.....
Albuquerque.....	13	10	2	.....	.....	.....	.....	.....	.....	.....	.....	141	294	435	435	435	.....	.....
Manuelito.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(1)	.....	.....	260	414	.....	.....
Mescalero.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	260	280	310	310	310	.....	.....
Pueblo Bonito.....	1	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	115	300	300	300	.....	.....
Pueblo Day Schools.....	1	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	112	301	4,862	3,480	8,794	(13)
San Juan.....	2	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	450	650	2,800	2,800	.....	(13)
Zuni.....	54	45	6	1	.....	.....	.....	.....	.....	.....	.....	(13)	.....	.....	325	250	1,100	*1,805 (13)
New York: New York Agency.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	2,912	1,448	6,100	6,100	287	80
North Carolina: Cherokee.....	4	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	1,600	.....	1,985	1,280	2,369	1,805
North Dakota.....	3	72	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	1,894	5,804	5,450	2,900	8,891	6,395
Fort Berthold.....	1	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	345	650	650	500	1,176	1,176
Fort Totten.....	16	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	300	400	400	400	979	979
Standing Rock.....	35	36	1	.....	.....	.....	.....	.....	.....	.....	.....	22	1,064	1,000	2,000	3,427	3,427	921
Turtle Mountain.....	1	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	153	3,154	2,000	1,200	3,509	813
Oklahoma.....	34	146	18	162	8	34	39	50	211	95	72	40	5	3,046	1,025	12,928	10,389	15,646	17,145
Cantonment.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	118	.....	389	387	660	733
Cheyenne and Arapaho.....	2	10	8	4	.....	.....	.....	.....	.....	.....	.....	2	555	.....	325	430	1,205	1,205
Kiowa.....	6	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	1,000	400	2,500	1,880	3,500	4,574
Ojibwa.....	5	52	57	2	.....	.....	.....	.....	.....	.....	.....	22	580	1,125	1,912	1,912	2,154	1,948
Pawnee.....	6	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	219	432	432	432	529	529
Ponca.....	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	198	.....	457	726	727	864
Sac and Fox.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	198	.....	570	1,072	1,072	207
Sage.....	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	31	603	370	678	678	154
Shawnee.....	11	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	245	275	200	742	742	800
Shawnee.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	(1)	1,732	1,693	1,763	1,763	775	
Shawnee.....	14	14	6	.....	.....	.....	.....	.....	.....	.....	.....	50	100	2,763	2,560	3,023	3,023	960
Oregon.....	1	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	1,180	650	2,830	1,880	3,464	2,382
Klamath.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	520	.....	1,000	680	1,154	99
Roseburg.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	110	150	450	1,158	908	908
Siletz.....	1	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	300	500	860	560	562	562
Umatilla.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	260	.....	450	450	822	813
Warm Springs.....	1	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	260	.....	450	450	822	813

* No record.
 * 1918 report.
 * Under State jurisdiction.
 * Does not include Sisters of Charity.
 * Discontinued May 15, 1918; under Greenville, Reno, Siletz and Warm Springs.
 * Includes all churches on reservation.
 * Unknown.
 * Estimated.
 * Includes scattered tribes in California.
 * Not reported.
 * As reported.
 * Residences used for church purposes.
 * No data.

TABLE 4.—Marriages, missionaries, churches, English language, citizenship, crimes, missionaries, etc., June 30, 1919—Continued.

States and superintendencies.	Marriages.				Crimes.		Misde- meanors.		Attests for drunken- ness.		Mission- aries work- ing among Indians.		Church-going Indians.		Indians who—					
	Between Indians and whites.	Between Indians.	By tribal custom.	By legal proceed- ure.	By Indians.	By whites.	By Indians.	By whites.	Indians.	Whites.	Protestant.	Catholic.	Protestant.	Catholic.	Speak English language.	Read and write English language.	'Wear citizens' clothing.	Are citizens of the United States.	Are voters.	
South Dakota.	16	168	...	184	29	9	91	...	4	...	138	28	182	14,192	8,977	14,700	10,068	22,907	10,737	4,215
Cheyenne River.	...	29	...	29	2	...	...	...	...	...	4	3	30	1,074	1,097	1,972	1,107	2,772	943	243
Crow Creek.	...	4	...	4	...	...	2	...	4	...	3	2	10	705	315	550	600	954	84	877
Flandreau.	1	...	...	1	5	...	...	...	...	...	2	2	2	302	225	280	249	283	283	89
Lower Brule.	3	...	...	3	...	...	8	...	...	...	2	1	7	888	187	378	352	515	515	97
Pierre.	...	...	...	...	...	...	...	...	...	...	3	1	...	115	115	283	283	283	...	...
Pine Ridge.	3	44	...	47	9	4	30	...	...	...	46	14	64	3,869	8,300	6,000	8,000	7,300	660	700
Rapid City.	...	...	...	...	2	2	36	...	...	...	83	4	42	3,515	2,900	2,600	2,600	2,300	5,300	1,300
Rosebud.	5	27	...	32	11	3	3	...	...	...	13	2	12	1,170	1,170	1,400	1,300	2,304	583	583
Sisseton.	4	25	...	29	...	...	4	...	...	...	21	3	15	1,585	1,750	1,900	1,300	3,075	2,075	666
Yankton.	...	...	...	...	...	...	...	...	...	...	10	...	10	313	...	824	197	1,122	1,210	900
Utah.	1	27	24	4	...	...	...	...	...	...	21	...	...	...	...	287	50	387	100	100
Goshute.	3	3	2	...	...	...	...	...	...	...	7	...	7	105	...	287	50	387	100	100
Shivwits.	3	3	2	...	...	...	...	...	...	...	1	...	1	45	...	115	35	185	100	100
Utah and Ouray.	1	22	20	3	...	...	...	...	...	...	2	...	2	168	...	312	122	600	1,110	1,400
Washington.	10	69	...	79	21	...	53	4	38	1	0	10	35	1,737	8,077	9,978	6,999	10,417	7,884	898
Colville.	1	6	...	7	20	...	1	3	...	...	...	8	19	10	980	1,900	1,800	1,947	915	265
Cushman.	1	7	...	8	...	...	...	...	...	...	1	2	0	412	384	1,144	1,144	2,148	1,081	101
Neah Bay.	3	11	...	14	...	...	...	...	...	...	2	2	2	135	3	446	362	669	1,069	4
Spokane.	1	0	...	7	1	...	1	1	...	...	1	1	1	290	260	900	900	917	94	94
Taholah.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	682	328	782	1	1
Tulalip.	2	12	...	14	...	...	38	1	3	...	...	4	4	35	1,380	840	840	1,321	1,321	268
Yakima.	2	26	...	28	...	...	25	...	30	...	1	1	0	650	1,300	2,800	2,800	2,833	2,833	195

Wisconsin.....	13	88	27	74	1	8	6	29	5	70	6	19	24	22	3,181	3,246	7,532	5,839	9,605	4,339	1,026
Grand Rapids.....	28	28	6	6	1	1	2	.....	.....	1	.....	3	.....	.....	906	3	900	900	1,223	1,223	130
Hayward.....	.....	3	3	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1,160	1,440	800	700	1,296	1,296	140
Keshena.....	7	13	20	20	4	4	4	24	.....	43	.....	1	.....	.....	84	1,500	1,300	1,000	1,733	28	28
Lac du Flambeau.....	.....	5	5	5	.....	3	(1)	(1)	.....	.....	.....	1	1	2	.....	1,112	1,019	1,465	754	184	184
Lac Seul.....	.....	6	4	4	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	86	74	350	.....	.....
Lac Seul.....	.....	8	13	13	.....	.....	.....	.....	.....	50	6	4	.....	.....	.....	600	800	800	1,063	.....	285
Ontonagon.....	4	8	13	13	.....	.....	.....	.....	.....	6	6	7	13	3	209	191	2,500	2,000	2,030	728	728
Red Cliff.....	2	23	26	26	(1)	(1)	(1)	(1)	(1)	6	.....	.....	5	4	2,469	300	527	500	2,527	287	121
Wyoming: Shoshone.....	2	8	10	10	.....	6	1	4	.....	4	.....	12	11	17	875	300	1,060	860	1,712	97	97

1 Estimated.

2 No data.

3 Not reported.

TABLE 5.—Area of Indian lands June 30, 1919.

States and reservations.	Number of allotments.	Area in acres.		
		Allotted.	Unallotted.	Total.
Grand total.....	224,915	36,986,109	35,559,795	72,545,904
Total reservations.....	216,876	35,831,080	35,559,795	71,390,855
Total public domain.....	8,039	1,155,049		1,155,049
Arizona.....	1,767	81,729	18,571,285	18,653,014
Camp McDowell (Salt River).....			24,971	24,971
Cocopah.....			400	400
Colorado River.....	612	6,119	234,580	240,699
Fort Apache.....			1,681,920	1,681,920
Fort Mojave (Colorado River).....			31,328	31,328
Gila Bend (Pima).....			10,231	10,231
Gila River (Pima).....			371,422	371,422
Havasupai (Suppai).....			518	518
Hualapai (Truxton Canon).....			730,940	730,940
Kaibab.....			138,240	138,240
Moqui (Hopi).....			2,472,320	2,472,320
Navajo (See New Mexico and Utah).....	60	9,600	8,774,397	8,783,997
Papago.....			2,129,114	2,129,114
Papago (San Xavier, now Sells).....	291	41,608	114,348	155,954
Salt River.....	804	24,404	22,316	46,720
San Carlos.....			1,834,240	1,834,240
California.....	2,593	82,172	434,946	517,118
Bishop.....			80	80
Bishop (Paiute).....			75,806	75,806
Digger.....			530	530
Hoop Valley.....	639	29,091	99,051	128,142
Mission—				
Agua Caliente (Malki).....			7,205	7,205
Agustine (Malki).....			616	616
Cabazon (Malki).....			1,280	1,280
Cahuilla (Soboba).....			18,880	18,880
Campo.....			1,640	1,640
Capitan Grande (Pala).....			15,080	15,080
Cuyapipe (Campo).....			4,080	4,080
Inaja (Soboba).....			760	760
Laguna (Campo).....			320	320
La Posta (Campo).....			3,679	3,679
Los Coyotes (Soboba).....			21,520	21,520
Manzanita (Campo).....			19,680	19,680
Martinez (Malki).....			1,280	1,280
Mesa Grande (Soboba).....			4,400	4,400
Mission Creek (Malki).....			1,920	1,920
Morongo (Malki).....			11,069	11,069
Pala.....	177	1,396	3,084	4,480
Pechanga or Temecula (Pala).....	85	1,299	3,896	5,195
Potrero or La Jolla (Pala).....			8,329	8,329
Ramona (Soboba).....			560	560
Rincon (Pala).....			2,554	2,554
San Manuel (Malki).....			653	653
San Pasqual (Pala).....			2,200	2,200
Santa Rosa (Soboba).....			2,560	2,560
Santa Ynez (Soboba).....			120	120
Santa Ysabel (Soboba).....			15,042	15,042
Soboba.....			5,461	5,461
Syquan (Pala).....	17	270	370	640
Torres (Malki).....			20,800	20,800
Tuolumne.....			34	34
Twenty-nine Palms (Malki).....			480	480
Round Valley.....	877	42,106		42,106
Tule River.....			48,551	48,551
Yuma (Fort Yuma).....	798	8,010	31,376	39,386
Colorado.....	372	72,731	396,143	468,874
Ute (Ute Mountain and Southern Ute).....	371	72,651	396,143	468,794
Absentee Wyandot.....	1	80		80
Florida: Seminole.....			23,542	23,542
Idaho.....	4,377	628,098	54,841	682,939
Coeur d'Alene.....	638	104,077		104,077
Fort Hall.....	1,863	345,209	21,268	366,472
Lapwai (Nez Perce).....	1,676	178,812	33,578	212,390

TABLE 5.—Area of Indian lands June 30, 1919—Continued.

States and reservations.	Number of allotments.	Area in acres.		
		Allotted.	Unallotted.	Total.
Iowa: Sac and Fox.....			3,251	3,251
Kansas.....	3,079	272,519		272,519
Chippewa and Munsee (Potawatomi).....	100	4,195		4,195
Iowa (Kickapoo).....	143	11,769		11,769
Kickapoo.....	351	27,691		27,691
Potawatomi.....	2,363	220,785		220,785
Sac and Fox (Kickapoo).....	122	8,079		8,079
Michigan.....	2,648	153,227	191	153,418
Isabella.....	1,943	98,395	191	98,581
L'Anse.....	669	52,201		52,201
Ontonagon.....	36	2,631		2,631
Minnesota.....	8,366	954,715	553,798	1,508,513
Bois Fort (Nett Lake).....	712	56,782		56,782
Deer Creek (Nett Lake).....	4	296		296
Fond du Lac.....	596	36,846		36,846
Grand Portage.....	304	24,191		24,191
Leech Lake.....	631	48,520		48,520
Mdewakanton (Birch Coulee).....	135	12,582		12,582
Red Lake.....			543,528	543,528
Vermilion Lake.....			1,080	1,080
White Earth.....	5,158	710,765	9,190	719,955
White Oak Point and Chippewa (Leech Lake).....	826	64,733		64,733
Montana.....	10,353	2,510,000	3,543,673	6,053,673
Blackfeet.....	2,656	889,199	604,188	1,493,387
Crow.....	2,800	542,183	1,771,030	2,313,213
Fort Belknap.....			622,917	622,917
Fort Peck.....	2,469	850,210		850,210
Joeke (Flathead).....	2,428	228,408		228,408
Northern Cheyenne (Tongue River).....			489,500	489,500
Rocky Boy's Agency.....			56,038	56,038
Nebraska.....	4,037	353,424	6,118	359,542
Omaha.....	1,460	130,642	4,380	135,022
Ponca (Santee).....	168	27,236		27,236
Santee (Niobrara).....	850	73,251		73,251
Sioux (additional).....			640	640
Winnebago.....	1,559	122,295	1,098	123,393
Nevada.....	979	14,133	721,477	735,610
Duck Valley (Western Shoshone).....			321,920	321,920
Moapa River.....	117	605	523	1,128
Palute (Fallon).....	366	3,650	990	4,640
Pyramid Lake (Nevada).....			322,000	322,000
Walker River.....	496	9,878	75,204	85,082
Winnemucca.....			840	840
New Mexico.....	2,800	673,175	4,024,049	4,697,224
Jicarilla Apache.....	796	353,812	407,300	761,112
Mescalero Apache.....			474,240	474,240
Navajo (see Arizona and Utah).....	2,004	319,363	1,980,637	2,300,000
Pueblo—				
Acoma (Albuquerque).....			95,792	95,792
Cochiti.....			24,256	24,256
Isleta (Albuquerque).....			110,080	110,080
Jemez.....			42,359	42,359
Laguna (Albuquerque).....			101,511	101,511
Laguna withdrawals ¹			150,000	150,000
Nambe.....			13,586	13,586
Picuris.....			17,461	17,461
Pojoaque.....			13,520	13,520
San Dia (Albuquerque).....			24,187	24,187
San Juan.....			17,545	17,545
San Felipe (Albuquerque).....			34,767	34,767
Santa Ana (Albuquerque).....			17,361	17,361
Santa Clara.....			49,369	49,369
Santo Domingo.....			92,398	92,398

¹ Includes 12,348 acres purchased from Omaha Indians² Executive orders 1910 and 1917.

TABLE 5.—Area of Indian lands June 30, 1919—Continued.

States and reservations.	Number of allotments.	Area in acres.		
		Allotted.	Unallotted.	Total.
New Mexico—Continued.				
Pueblo—Continued.				
Sila.....			17,515	17,515
San Ildefonso.....			17,293	17,293
Taos.....			17,361	17,361
Tesuque.....			17,471	17,471
Zuni.....			288,040	288,040
New York.....			87,677	87,677
Allegany.....			30,469	30,469
Cattaraugus.....			21,680	21,680
Oil Spring.....			640	640
Oneida.....			350	350
Onondaga.....			6,100	6,100
St. Regis.....			14,640	14,640
Tonawanda.....			7,549	7,549
Tuscarora.....			6,249	6,249
North Carolina: Qualla.....			63,211	63,211
North Dakota.....	8,380	2,005,320	100,000	2,105,320
Devils Lake (Fort Totten).....	1,189	137,381		137,381
Fort Berthold.....	2,165	435,708	100,000	535,708
Standing Rock.....	4,700	1,388,411		1,388,411
Turtle Mountain.....	326	43,820		43,820
Oklahoma.....	116,701	19,548,748	6,841	19,555,589
Cherokee.....	40,193	4,346,223	10	4,346,233
Chickasaw.....	10,955	3,800,190	10	3,800,200
Choctaw.....	26,723	4,291,036	5,992	4,297,028
Creek.....	18,710	2,997,114	320	2,997,434
Seminole.....	3,118	359,535	122	359,657
Cherokee Outlet.....	62	4,949		4,949
Cheyenne and Arapaho.....	3,331	528,789		528,789
Iowa (Sac and Fox).....	108	8,605		8,605
Kansa (Kaw and Ponca).....	247	99,644		99,644
Kickapoo (Shawnee).....	280	22,650		22,650
Kiowa, Comanche, and Apache.....	3,451	547,236		547,236
Modoc (Seneca).....	68	3,966		3,966
Oakland (Ponca).....	73	11,456		11,456
Osage.....	2,230	1,465,350		1,465,350
Otoe.....	514	128,351		128,351
Ottawa (Seneca).....	160	12,995		12,995
Pawnee.....	820	112,701		112,701
Peoria (Seneca).....	218	43,334		43,334
Ponca.....	782	100,745	387	101,132
Potawatomi (Shawnee).....	2,109	291,736		291,736
Quapaw (Seneca).....	248	56,245		56,245
Sac and Fox.....	548	87,684		87,684
Seneca.....	435	41,813		41,813
Shawnee.....	117	12,745		12,745
Wichita (Kiowa).....	957	152,714		152,714
Wyandotte (Seneca).....	244	20,942		20,942
Oregon.....	4,254	508,817	1,209,189	1,718,006
Grande Ronde (Siletz).....	269	32,983		32,983
Klamath.....	1,352	208,439	812,547	1,020,986
Siletz.....	551	44,459		44,459
Umatilla.....	1,115	82,644	74,130	156,774
Warm Springs.....	967	140,292	322,612	462,904
South Dakota.....	27,476	6,276,502	403,074	6,679,576
Cheyenne River.....	3,686	992,681	218,149	1,210,830
Crow Creek and Old Winnebago.....	1,460	272,560		272,560
Lake Traverse (Sisseton).....	2,006	306,838		306,838
Lower Brule.....	869	202,631	23,960	226,591
Pine Ridge.....	8,257	2,363,813	161,566	2,525,378
Rosebud.....	8,585	1,867,716		1,867,716
Yankton.....	2,613	268,263		268,263

TABLE 5.—Area of Indian lands June 30, 1919—Continued.

States and reservations.	Number of allotments.	Area in acres.		
		Allotted.	Unallotted.	Total.
Utah	1,367	111,947	1,529,360	1,641,307
Goshute and Deep Creek.....			34,500	34,500
Navajo (see Arizona and New Mexico).....			600,000	600,000
Palute (Navajo).....			600,000	600,000
Shivwits.....			26,880	26,880
Skull Valley.....			18,640	18,640
Uintah Valley.....	777	39,620	249,340	288,960
Uncompahgre.....	590	72,327		72,327
Washington	9,963	1,019,559	1,699,327	2,718,886
Chehalis (Cushman).....	36	3,799		3,799
Columbia (Colville).....	35	22,618		22,618
Colville.....	2,921	333,275	1,009,100	1,342,375
Hoh River (Neah Bay).....			640	640
Kallspel (Coeur d'Alene).....			4,629	4,629
Lummi (Tulalip).....	109	12,561		12,561
Makah (Neah Bay).....	373	3,725	19,312	23,040
Muckleshoot (Cushman).....	43	3,491		3,491
Nisqually (Cushman).....	30	4,717		4,717
Ozette (Neah Bay).....			640	640
Fort Madison (Tulalip).....	51	7,219	65	7,284
Puyallup (Cushman).....	167	17,463		17,463
Quileute (Neah Bay).....			837	837
Quinalt (Taholah).....	690	54,990	168,553	223,543
Shoalwater (Cushman).....			335	335
Skokomish (Cushman).....	134	7,803		7,803
Snohomish (Tulalip).....	164	22,186	324	22,490
Spokane.....	628	64,954	82,488	147,442
Squaxon Island (Cushman).....	23	1,494		1,494
Swinomish (Tulalip).....	71	7,350		7,350
Yakima.....	4,488	451,922	412,404	864,326
Wisconsin	4,967	319,186	270,574	589,760
Lac Courte Oreille (Hayward).....	881	68,910	540	69,450
Lac du Flambeau.....	603	45,756	24,424	70,180
La Pointe (Bad River).....	1,610	115,968	13,930	129,898
Menominee (Keshena).....			231,680	231,680
Onida.....	1,504	65,466		65,466
Red Cliff.....	205	14,166		14,166
Stockbridge and Munsee (Keshena).....	167	8,920		8,920
Wyoming: Wind River (Shoshone)	2,397	245,058	1,857,228	2,102,286
Diminished.....	2,029	211,040	587,029	798,069
Ceded.....	368	34,018	1,270,199	1,304,217
Public domain	8,039	1,155,049		1,155,049

TABLE 6.—General data for each Indian reservation to June 30, 1919.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
ARIZONA.		
Camp McDowell (Under Salt River School.) Tribe: Mohave Apache.	<i>Acres.</i> 24,971	Executive order, Sept. 15, 1903; act of Apr. 21, 1904, vol. 33, p. 211. (See Ann. Rept. 1905, p. 98.)
Cocopah Colorado River ¹ (Under Colorado River School.) Tribes: Chemehuevi, Kawia, Cocopa, ² Mohave.	400 * 234,580	Executive order, Sept. 27, 1917, school reserve. Act of Mar. 3, 1865, vol. 13, p. 559; Executive orders, Nov. 22, 1873, Nov. 16, 1874, and May 15, 1876. (See sec. 25, Indian appropriation act, approved Apr. 21, 1904, vol. 33, p. 224.) Act Apr. 30, 1908 (35 Stat., 77); act Apr. 4, 1910 (36 Stat., 273); act Mar. 3, 1911 (36 Stat., 1003); act Aug. 24, 1912 (37 Stat., 523); Executive order, Nov. 22, 1915. 616 Indians allotted 6,160 acres.
Fort Apache (Under Fort Apache School.) Tribes: Chillon, Chiricahua, Coyotero, Mimbreno, and Mogollon Apache.	* 1,681,920	Executive orders, Nov. 9, 1871, July 21, 1874, Apr. 27, 1876, Jan. 26 and Mar. 31, 1877; act of Feb. 20, 1893, vol. 27, p. 469; agreement made Feb. 25, 1896, approved by act of June 10, 1896, vol. 29, p. 358. (See act of June 7, 1897, vol. 30, p. 64.)
Fort Mojave (Under Fort Mojave School.) Tribe: Apache.	31,328	Executive orders, Dec. 1, 1910, and Feb. 2, 1911. Sec. 11, act June 25, 1910 (36 Stat., 855-856). (See 1857-1910.) Area original military reservation, 14,000 acres.
Gila Bend (Under Pima School.) Tribe: Papago.	* 10,231	Executive orders, Dec. 12, 1882, and Jan. 17, 1909. (See 4106, 1909.)
Gila River (Under Pima School.) Tribes: Maricopa and Pima.	* 371,422	Act of Feb. 28, 1850, vol. 11, p. 401; Executive orders, Aug. 31, 1876, Jan. 10, 1879, June 13, 1879, May 5, 1882, and Nov. 15, 1883; Mar. 22, May 8, July 31, 1911; Dec. 16, 1911; June 2, 1913; Aug. 27, 1914; Mar. 18, 1915, and July 19, 1915.
Havasupai (Supai) (Under Havasupai School.) Tribe: Havasupai.	* 518	Executive orders, June 8 and Nov. 23, 1880, and Mar. 31, 1882.
Hopi (Moqui) (Under Moqui School.) Tribe: Hopi (Moqui) and Navajo.	2,472,320	Executive order, Dec. 16, 1882. Act of Mar. 1, 1907 (34 Stat. L., 1021). (See 4106-1910.)
Kaibab (Under Kaibab School.) Tribes: Kaibab and San Juan Paiute.	138,240	Secretary's withdrawal, Oct. 15, 1907. (See 73654-1907.) Executive order, June 11, 1913.
Navajo ³ (Under Leupp, Navajo, Western Navajo, San Juan, and Pueblo Bonito Schools.) Tribe: Navajo.	11,687,793	Treaty of June 1, 1868, vol. 15, p. 607, and Executive orders, Oct. 29, 1878, Jan. 6, 1880, two of May 17, 1884, and Nov. 19, 1892. 1,769,000 acres in Arizona and 967,680 acres in Utah were added to this reservation by Executive order of May 17, 1884, and 46,080 acres in New Mexico restored to public domain, but again reserved by Executive orders, Apr. 24, 1886, Jan. 8, 1900, and Nov. 14, 1901. By Executive orders of Mar. 10 and May 15, 1905, 61,523 acres were added to reservation and by Executive order of Nov. 9, 1907, as amended by Executive order of Jan. 28, 1908, 2,972,160 acres were added. 2,064 Indians have been allotted 328,963 acres under the act of Feb. 8, 1887 (24 Stats., 388), as amended. By Executive orders of Dec. 30, 1908, and Jan. 16, 1911, the surplus lands, approximately 1,641,180 acres, in that part of the extension in New Mexico restored to the public domain. (See 35 Stat. L., 457 and 787.) (See 1277-9.) Act of May 27, 1902 (32 Stat., 264), and Mar. 3, 1913 (37 Stat., 1007), R. R. exchanges. Executive orders May 24, 1911, Feb. 17, 1912, (2), Feb. 10, 1913 (2), May 6, 1913, Dec. 1, 1913, July 23, 1914, and Feb. 19, 1915. Also 94,000 acres set aside temporarily for allotment by Executive order, Aug. 7, 1917.
Papago (Under San Xavier School.) Tribe: Papago.	2,443,462	Executive order, July 1, 1874, and act of Aug. 5, 1882, vol. 22, p. 291. 41,606 acres allotted to 291 Indians, and 14 acres reserved for school site, the residue, 27,563 acres, unallotted. (See letter book 208, p. 408.) Executive orders, June 16, 1911, and May 28, Sept. 2, Oct. 8, and Dec. 5, 1912, Oct. 27, 1914, Jan. 14, 1916, and Feb. 1, 1917.
Salt River (Under Salt River School.) Tribes: Maricopa and Pima.	22,317	Executive orders, June 14, 1879, and Oct. 20 1910; Sept. 28 and Oct. 23, 1911. (See 26731-1910.) (See Senate Doc. 90, 58th Cong., 2d sess.) 804 Indians allotted 24,403 acres under general allotment act.
San Carlos (Under San Carlos School.) Tribes: Arivaipa, Chillon, Chiricahua, Coyotero, Mimbreno, Mogollon, Mohave, Pinal, San Carlos, Tonto, and Yuma Apache.	* 1,634,240	Executive orders, Nov. 9, 1871, Dec. 14, 1872, Aug. 5, 1873, July 21, 1874, Apr. 27 and Oct. 30, 1876, Jan. 26 and Mar. 31, 1877; act of Feb. 20, 1893, vol. 27, p. 469; agreement made Feb. 25, 1896, approved by act of June 10, 1896, vol. 29, p. 358. (For fuller text see Misc. Indian Doc., vol. 39, p. 25910.) (See act of June 7, 1897, vol. 30, p. 64; act of Mar. 2, 1901, vol. 31, p. 952.) Executive order of Dec. 22, 1902.

¹ Partly in California.² Outboundaries surveyed.³ Surveyed.⁴ Not on reservation.⁵ Partly in New Mexico. (See Table 5.)

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
ARIZONA—continued.		
Walapai..... (Under Truxton Cañon School.) Tribe: Walapai.	Acres. 730,949	Executive orders, Jan. 4, 1883, Dec. 22, 1896, May 14, 1900, June 2, 1911, May 29, 1912, and July 18, 1913.
Total.....	21,884,682	
CALIFORNIA.		
Camp or Fort Independence...	360	Executive orders, Oct. 28, 1915, and Apr. 29, 1916.
Cold Springs.....	160	Executive order, Nov. 10, 1914.
Colony or Nevada.....	75	Executive order, May 6, 1913.
Digger..... (Under a farmer.) Tribe: Digger.	370	Act of Mar. 3, 1883 (27 Stats., 612), provides for purchase of 330 acres; not allotted. 40 acres were reserved by order of the Secretary of the Interior, Oct. 28, 1908, for Digger Indians. (See 44597-1907, 71881-1908, 39245-1909.)
Fort Bidwell.....	320	Executive order, Aug. 8, 1917, school reserve.
Grodiville band.....	160	Secretary's withdrawal for wood lot. (See 22366-1909.)
Hoopa Valley..... (Under Hoopa Valley School.) Tribes: Hunsatung, Hu-pa, Klamath River, Miskut, Redwood, Salaz, Sernalton, and Tishanatan.	1 99,051	Act of Apr. 6, 1884, vol. 13, p. 39; Executive orders, June 23, 1876, and Oct. 16, 1891. There have been allotted to 639 Indians 29,143.38 acres, reserved to 3 villages 68.74 acres, and opened to settlement under act of June 17, 1892 (27 Stats., p. 52), 15,006.11 acres of land (formerly Klamath River Reservation). (Letter book 263, p. 96; 382, p. 480-383, p. 170.)
Mission (28 reserves)..... (Under Martinez, Soboba, Pechanga, Malki, Campo and Volcan Schools.) Tribes: Diegueno, Kawiia, San Luis Rey, Serranos, and Temecula.	181,844	Executive orders, Jan. 31, 1870, Dec. 27, 1875, May 15, 1876, May 3, Aug. 25, Sept. 20, 1877, Jan. 17, 1880, Mar. 2, Mar. 9, 1881, June 27, July 24, 1882, Feb. 5, June 19, 1883, Jan. 25, Mar. 22, 1886, Jan. 26, Mar. 14, 1887, and May 6, 1888. 270.24 acres allotted to 17 Indians and for church and cemetery purposes on Syquan Reserve (letter book 303, p. 297), and 1,229.47 acres allotted to 85 Temecula Indians, 2.70 acres reserved for school purposes (letter book 351, p. 312). Executive order, Dec. 29, 1891. Proclamations of President of Apr. 16, 1901, vol. 32, p. 1970, and May 23, 1902, vol. 32, p. 2005; act of Feb. 11, 1903, vol. 32, p. 822. 174,636.73 acres patented by the Government to various bands under acts of Jan. 12, 1891 (26 Stat. L., 712), and Mar. 1, 1907 (34 Stat. L., 1015-1022). (See misc. tract book 36, and President's proclamation, Aug. 31, 1915.) See Ex. Ords. Aug. 16, 1917; Jan. 26, 1918, extending trust periods 10 years.
Chuckekansies.....	160	Executive orders, Apr. 24, 1912, and Aug. 14, 1914.
Los Coyotes.....	3,840	Executive order, Apr. 13, 1914.
Morongo.....		Proclamation of Nov. 12, 1913, partly canceling Executive order withdrawal.
Palute.....	75,806	Executive orders, Mar. 11, 1912, May 9, 1912, Sept. 7, 1912, Sept. 16, 1912, Feb. 14, 1913, and July 22, 1915.
Pala..... (Formerly Warner's Ranch Indians.)		119.99 acres allotted to 15 Indians (letter book 303, p. 57). 162 allotments of approximately 2 acres of irrigable land and 6 acres of grazing land approved and patented under act of Feb. 8, 1887 (24 Stat. L., 388), as amended. Lands reserved under authority of acts of Jan. 12, 1891 (26 Stat. L., 712), and Mar. 1, 1907 (34 Stat. L., 1022), and bought under act of May 8, 1902 (32 Stat. L., 257). See authority 7971 and letter book 550, p. 113. Deed recorded in Miscellaneous Record Book No. 5, p. 193.
Round Valley..... (Under Round Valley School.) Tribes: Clear Lake, Con-cow, Little Lake, Nomelaki, Pit River, Potter Valley, Redwood Wailaki, and Yuki.		Acts of Apr. 8, 1864, vol. 13, p. 39, and Mar. 3, 1873, vol. 17, p. 634; Executive orders, Mar. 30, 1870, Apr. 8, 1873, May 18, 1875, and July 26, 1876; act of Oct. 1, 1890, vol. 26, p. 658. 42,105.56 acres allotted to 1,034 Indians, 1,110 acres reserved for school and agency purposes (72068-1907, letter books 268, p. 17, and 395, p. 260). (See act of Feb. 8, 1906, providing for a reduction of area of reservation, vol. 33, p. 706.) 36,692.23 acres additional allotments made to 619 Indians and 740 acres reserved for school purposes.
Tule River..... (Under Tule River School.) Tribes: Kawiia, ⁴ Kings River, Moache, Tehon, Tule, and Wichummi. ⁵	48,551	Executive orders, Jan. 9 and Oct. 3, 1873, and Aug. 3, 1878.
Yuma..... (Under Fort Yuma School.) Tribe: Yuma-Apache.	30,949	Executive order, Jan. 9, 1884; agreement, Dec. 4, 1893, ratified by act of Aug. 15, 1894, vol. 28, p. 332. (See sec. 25, Indian appropriation act, approved Apr. 21, 1904, vol. 33, p. 224.) 7,756.54 acres irrigable land opened under act of June 17, 1902 (32 Stats., 388), act Mar. 3, 1911 (36 Stats., 1063). 5,110 acres allotted to 811 Indians.
Total.....	441,646	

¹ Outboundaries surveyed.
² Partly surveyed.
³ Partly in Nevada.

⁴ Not on reservations.
⁵ Partly in New Mexico.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
COLORADO.		
Ute ¹ (Under Navajo Springs and Southern Ute Schools.) Tribes: Capote, Moache, and Wiminuche Ute.	Acres. 396,143	Treaties of Oct. 7, 1863, vol. 13, p. 673, and Mar. 2, 1868, vol. 15, p. 618, act of Apr. 29, 1874, vol. 18, p. 36; Executive orders, Nov. 22, 1875, Aug. 17, 1876, Feb. 7, 1879, and Aug. 4, 1882, and act of Congress approved June 15, 1880, vol. 21, p. 199, and July 28, 1882, vol. 22, p. 178, May 14, 1884, vol. 23, p. 22, Aug. 15, 1894, vol. 28, p. 337, Feb. 20, 1895, vol. 28, p. 877. 72,651 acres allotted to 371 Indians and 360 acres reserved for use of Government (letter book 321, p. 86); also 7,360.32 acres allotted to 39 Indians (letter book 331, p. 395). 523,079 acres opened to settlement by President's proclamation dated Apr. 13, 1899 (31 Stats., 1947). The residue, 375,960 acres, retained as a reservation for the Wiminuche Utes. Act June 30, 1913 (38 Stat., 82), exchange of lands with Indians. Executive order, Nov. 12, 1915.
Total.....	396,143	
FLORIDA.		
Seminole..... (Under special agent.)	* 26,741	Acts Aug. 15, 1894 (28 Stats., 303), Mar. 2, 1895 (28 Stat., 892), June 10, 1896 (29 Stat., 337), June 7, 1897 (30 Stat., 78), Mar. 1, 1899 (30 Stat., 538), June 6, 1900 (31 Stat., 302), Apr. 4, 1910 (36 Stat., 274). 23,061.72 acres purchased for Seminole Indians in Florida under acts mentioned (see Annual Report for 1900, p. 101). 3,690 acres reserved by Executive order of June 28, 1911. (See 20817-1906.)
Total.....	26,741	
IDAHO.		
Coeur d'Alene..... (Under Coeur d'Alene Agency.) Tribes: Coeur d'Alene, Kutenai, ² Pend d'Oreille, ² and Spokane.		Executive orders June 14, 1867, and Nov. 8, 1873; agreements made Mar. 26, 1887, and Sept. 9, 1889, and confirmed in Indian appropriation act approved Mar. 3, 1891, vol. 26, pp. 1026, 1029. Agreement, Feb. 7, 1894, ratified by act of Aug. 15, 1894, vol. 28, p. 322. 638 Indians have been allotted 104,077 acres and 1,906.99 acres have been reserved for agency, school, and church purposes and for mill sites. (See 86950-1908, and acts of June 21, 1906 (34 Stat. L., 325-355), Mar. 3, 1891 (26 Stat. L., 1026-1029), Aug. 15, 1894 (28 Stat. L., 322), Mar. 27, 1908 (35 Stat. L., 56), Apr. 30, 1909 (35 Stat. L., 78). President's proclamation issued May 22, 1909, opening 224,210 acres surplus lands to settlement. (37 L. D., 698.)
Fort Hall..... (Under Fort Hall School.) Tribes: Bannock and Shoshoni.	* 21,263	Treaty of July 3, 1868, vol. 15, p. 673; Executive orders, June 14, 1867, and July 30, 1869; agreement with Indians made July 18, 1881, and approved by Congress July 3, 1882, vol. 22, p. 148; agreement of May 27, 1887, ratified by acts of Sept. 1, 1888, vol. 25, p. 452, Feb. 23, 1889, vol. 25, p. 687, and Mar. 3, 1891, vol. 26, p. 1011. Agreement made Feb. 5, 1898, ratified by act of June 6, 1900, vol. 31, p. 672, ceding 416,000 acres, of which 6,298.72 acres have been allotted to 79 Indians (see letter book 527, p. 478); remainder of ceded tract opened by settlement June 17, 1902 (President's proclamation of May 7, 1902, vol. 32, p. 1997), act of Mar. 30, 1904, vol. 33, p. 153, act of Mar. 3, 1911 (36 Stat., 1064); 1,863 allotments, covering 338,909 acres, approved Oct. 28, 1914 (37106-13).
Lapwai..... (Under Fort Lapwai School.) Tribe: Nez Perce.	34,190	Treaty of June 9, 1863, vol. 14, p. 647; agreement, May 1, 1893, ratified by act of Aug. 15, 1894, vol. 28, p. 326. 178,812 acres allotted to 1,876 Indians, 2,170.47 acres reserved for agency, school, mission, and cemetery purposes, and 32,020 acres of timberland reserved for the tribe; the remainder restored to public settlement. (President's proclamation, Nov. 8, 1898, 29 Stats., 873.)
Lemhi.....		Unratified treaty of Sept. 24, 1868, and Executive order, Feb. 12, 1875; agreement of May 14, 1890, ratified by act of Feb. 23, 1899, vol. 25, p. 687. (See 34 Stat. L., 335, and agreement executed Dec. 28, 1905, approved by President Jan. 27, 1906.) Act of June 21, 1906 (34 Stat., 334), about 64,000 acres opened in 1908. (See 36809-1900.)
Total.....	55,453	

¹ Partly in New Mexico.² Surveyed.³ Not on reservation.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
IOWA.		
Sauk and Fox. (Under Sac and Fox Agency.) Tribes: Potawatomi, Sauk and Fox of the Mississippi, and Winnebago.	Acres. 3,480	By purchase. (See act of Mar. 2, 1867, vol. 14, p. 507.) Deeds 1857, 1865, 1867, 1868, 1869, 1876, 1880, 1882, 1883, 1888, June, July, and Oct., 1892-1896. (See act of Feb. 13, 1891, vol. 26, p. 749.) (See Ann. Repts., 1891, p. 681; 1896, p. 81.) Deeds recorded, vol. 6. (See 95356-1907.)
Total.....	3,480	
KANSAS.		
Chippewa and Munsee (Under Potawatomi School.) Tribes: Chippewa and Munsee.		Treaty of July 16, 1859, vol. 12, p. 1105. 4,195.31 acres allotted to 100 Indians; the residue, 200 acres, allotted for missionary and school purposes. Patents issued to allottees; balance of allotments sold and proceeds paid to heirs. (See ninth section of act of June 7, 1897, vol. 30, p. 92; L. B., 332, p. 63.)
Iowa ¹ (Under Kickapoo School.) Tribe: Iowa.		Treaties of May 17, 1854, vol. 10, p. 1069, and of Mar. 6, 1861, vol. 12, p. 1171. 11,768.77 acres of land allotted to 143 Indians; 162 acres reserved for school and cemetery purposes. (Letter book 266, p. 86.) Acts Mar. 3, 1885 (2 Stat., 352), and Jan. 26, 1887 (24 Stat., 367).
Kickapoo (Under Kickapoo School.) Tribe: Kickapoo.		Treaty of June 28, 1862, vol. 13, p. 623. 27,691.27 acres allotted to 351 Indians; 245 acres reserved for church and school; the residue, 398.87 acres, unallotted (letter books 304, p. 480, and 772, p. 54). (Acts of Aug. 4, 1886 (24 Stat., 219), Feb. 28, 1899, vol. 30, p. 909, and Mar. 3, 1903, vol. 32, p. 1007.)
Potawatomi. (Under Potawatomi School.) Tribe: Prairie Band of Potawatomi.		Treaties of June 5, 1846, vol. 9, p. 853; of Nov. 15, 1861, vol. 12, p. 1191; treaty of relinquishment, Feb. 27, 1861, vol. 15, p. 531. 220,785 acres allotted to 2,363 Indians; 319 acres reserved for school and agency, and 1 acre for church. (Acts of Feb. 28, 1899, vol. 30, p. 909, and Mar. 3, 1903, vol. 32, p. 1007.) 960 acres surplus tribal land sold under act Feb. 28, 1899. Executive order Nov. 12, 1917, extending trust period 10 years, except in 11 cases.
Sauk and Fox ¹ (Under Kickapoo School.) Tribe: Sauk and Fox of the Missouri.		Treaties of May 18, 1854, vol. 10, p. 1074, and of Mar. 6, 1861, vol. 12, p. 1171; acts of June 10, 1872, vol. 17, p. 391, and Aug. 15, 1876, vol. 19, p. 208. 2,843.97 acres in Kansas, 4,194.33 acres in Nebraska, aggregating 7,038.30 acres, allotted to 84 Indians, and under act June 21, 1906 (34 Stat., 324-340), 960.91 acres were allotted to 37 Indians, leaving 57 acres unallotted. (Letter books 233, p. 361; 383, p. 37; and 512, p. 110.)
Total.....		
MICHIGAN.		
Isabella ² Tribe: Chippewa of Saginaw, Swan Creek, and Black River.	191	Executive order, May 14, 1855; treaties of Aug. 2, 1855, vol. 11, p. 633, and of Oct. 18, 1864, vol. 14, p. 657. 93,393 acres allotted to 1,943 Indians.
L'Anse. (Under special agent.) Tribe: L'Anse and Vieux Desert Bands of Chippewa of Lake Superior.		Treaty of Sept. 30, 1854, vol. 10, p. 1109. 52,121 acres allotted to 668 Indians. Payment for lands in sec. 16, see 93879-1907. Unappropriated tracts, see 10293-1915.
Ontonagon. (Under special agent.) Tribe: Ontonagon Band of Chippewa of Lake Superior.		Sixth clause, second article, treaty of Sept. 30, 1854, vol. 10, p. 1109; Executive order, Sept. 25, 1855. 2,561.35 acres allotted to 25 Indians.
Ottawa and Chippewa.....		Treaty July 31, 1855. (11 Stat., 621.) 120,470 acres allotted to 1,318 Indians.
Total.....	191	
MINNESOTA.		
Bois Fort. (Under Nett Lake School.) Tribe: Bois Fort Chippewa.		Treaty of Apr. 7, 1866, vol. 14, p. 765; act of Jan. 14, 1880, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 63.) 56,467.20 acres allotted to 721 Indians and 434.63 acres reserved for agency, etc., purposes. (L. B. 359.382); residue, 51,863 acres, opened to public settlement.

¹ In Kansas and Nebraska.

² Agency abolished June 30, 1889.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
MINNESOTA—continued.		
Deer Creek. (Under Nett Lake School.) Tribe: Bois Fort Chippewa.	Acres.	Executive order, June 30, 1883; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 63.) 295.55 acres allotted to 4 Indians; residue, 22,744 acres, opened to public settlement. (Executive order of Dec. 21, 1858.)
Fond du Lac. (Under Fond du Lac School.) Tribe: Fond du Lac Band of Chippewa of Lake Superior.		Treaty of Sept. 30, 1854, vol. 10, p. 1109; act of May 26, 1872, vol. 17, p. 190. 37,121 acres allotted to 593 Indians; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 60.) The residue, 76,837 acres, restored to settlement. Agreement of Nov. 21, 1889. (See act of Jan. 14, 1889, vol. 25, p. 642.) Act June 30, 1913 (Public No. 4), and Executive order, Mar. 4, 1915.
Grand Portage (Pigeon River). (Under Grand Portage agency.) Tribe: Grand Portage Band of Chippewa of Lake Superior.		Treaty of Sept. 30, 1854, vol. 10, p. 1109; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 59.) 24,191.31 acres allotted to 804 Indians; 208.24 acres reserved for agency and wood purposes; residue, 16,041.97 acres, opened to public settlement. Executive order, Mar. 21, 1917, setting aside two small unsurveyed islands for reservation purposes.
Leech Lake. (Under Leech Lake Agency.) Tribes: Cass Lake, Pillager, and Lake Winibigoshish Bands of Chippewa.		Treaty of Feb. 22, 1855, vol. 10, p. 1165; Executive orders, Nov. 4, 1873, and May 26, 1874; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 49.) 48,446 acres allotted to 630 Indians and 321.60 acres reserved for agency and school purposes. (Act of June 27, 1902, vol. 32, p. 402.) Minnesota National Forest act, May 23, 1908 (35 Stat., 268). Executive order Feb. 16, 1911.
Mdewakanton. (Under Birch Cooley School.) Tribe: Mdewakanton Sioux.		By purchase. (See acts of July 4, 1834, Mar. 3, 1835, May 15, 1836, June 29, 1838 (25 Stat., 228); Mar. 2, 1889 (25 Stat., 992), and Aug. 19, 1890 (26 Stat., 349). 339.70 acres deeded to 47 Indians; 12,242.76 acres allotted to 88 Indians and held in trust by the United States; 8.90 acres reserved for school. (See Ann. Rpt., 1891, pp. 111 and 179, and schedule approved Nov. 21, 1904.) Act Mar. 4, 1917 (39 Stat. 1., 1195).
Mille Lac. (Under White Earth School.) Tribe: Mille Lac and Snake River Bands of Chippewa.		Treaties of Feb. 22, 1855, vol. 10, p. 1165, and article 12, of May 7, 1864, vol. 13, pp. 693, 695; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 47.) Joint resolution (No. 5), Dec. 19, 1893, vol. 23, p. 576, and joint resolution (No. 40) approved May 17, 1898, vol. 30, p. 745. (See Ann. Rpt., 1899, pp. 38-43.) Purchase of land act of Aug. 1, 1914 (38 Stat., 591).
Red Lake. (Under Red Lake School.) Tribe: Red Lake and Pembina Chippewa.	543,528	Treaty of Oct. 2, 1863, vol. 13, p. 667; act of Jan. 14, 1889, vol. 25, p. 642. (See agreement July 8, 1889, H. Ex. Doc. No. 247, 51st Cong., 1st sess., pp. 27 and 32), and Executive order, Nov. 21, 1892. Act of Mar. 3, 1903, vol. 32, p. 1009, and act of Feb. 20, 1904, ratifying agreement made Mar. 10, 1902, vol. 33, p. 46, for sale of 256,152 acres. Act of Feb. 8, 1905, vol. 33, p. 708, granting 320 acres as right of way for the Minneapolis, Red Lake & Manitoba Ry. Co. Executive order, Feb. 16, 1911.
Vermilion Lake. (Under Vermilion Lake School.) Tribe: Bois Fort Chippewa.	1,060	Executive order, Dec. 20, 1881, act of Jan. 14, 1889, vol. 25, p. 642.
White Earth. (Under White Earth School.) Tribes: Chippewa of the Mississippi, Pembina, and Pillager Chippewa.	9,190	Treaty of Mar. 19, 1867, vol. 16, p. 719; Executive orders, Mar. 13, 1879, and July 13, 1883, act of Jan. 14, 1889, vol. 25, p. 642. (See agreement July 29, 1889, H. Ex. Doc. No. 247, 51st Cong., 1st sess., pp. 34 and 36.) Under act of Jan. 14, 1889 (25 Stat., 642), 428,401.05 acres have been allotted to 5,152 Indians, and 1,899.61 acres reserved for agency, school, and religious purposes, and under act of Apr. 28, 1904 (33 Stat., 539), 246,956.13 acres have been allotted to 2,816 Mississippi and Otter Tail Pillager Chippewa, being additional allotments to a part of the allottees under act of Jan. 14, 1889, leaving unallotted and unreserved 9,190 acres. Act June 21, 1906 (34 Stat., 353).
White Oak Point and Chippewa. (Under Leech Lake Agency.) Tribes: Lake Winibigoshish and Pillager Bands of Chippewa and White Oak Point Band of Mississippi Chippewa.		Treaties of Feb. 22, 1855, vol. 10, p. 1165, and of Mar. 19, 1867, vol. 16, p. 719; Executive orders, Oct. 29, 1873, and May 26, 1874; act of Jan. 14, 1889, vol. 25, p. 742. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., pp. 42, 49.) 64,732 acres allotted to 826 Indians; the residue opened to public settlement; 240 acres reserved for ball park. (See 289-1906.)
Total.....	553,798	

¹ Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
MONTANA.		
Blackfeet (Under Blackfeet School.) Tribes: Blackfeet, Blood, and Piegan.	<i>Acres.</i> 604,826	Treaty of Oct. 17, 1855, vol. 11, p. 657; unratified treaties of July 18, 1866, and of July 13 and 15 and Sept. 1, 1868; Executive orders, July 5, 1873, and Aug. 19, 1874; act of Apr. 15, 1874, vol. 18, p. 28; Executive orders, Apr. 13, 1875, and July 13, 1880, and agreement made Feb. 11, 1887, approved by Congress May 1, 1888, vol. 25, p. 129; agreement made Sept. 28, 1895, approved by act of June 10, 1896, vol. 29, p. 353; act of Feb. 27, 1905, confirming grant of 356.11 acres of land and 120 acres of unsurveyed land. (See vol. 33, p. 816.) Act of Mar. 1, 1907 (34 Stats., 1035). 2,656 Indians allotted 880,979 acres. 44,240.07 acres timber reserved. (See 4021-1013.)
Crow (Under Crow School.) Tribes: Mountain and River Crow.	1,771,630	Treaty of May 7, 1868, vol. 15, p. 649; agreement made June 12, 1860, and approved by Congress Apr. 11, 1882, vol. 22, p. 42, and agreement made Aug. 22, 1881, approved by Congress July 10, 1882, vol. 22, p. 157; Executive orders, Oct. 20, 1875, Mar. 8, 1876, Dec. 7, 1886; agreement made Dec. 8, 1890; ratified and confirmed in Indian appropriation act approved Mar. 3, 1891, vol. 26, p. 1039-1040; agreement made Aug. 27, 1892. (See Ann. Rept., 1892, p. 748; also President's proclamation, Oct. 15, 1892, vol. 27, p. 1084. Act of Apr. 27, 1904, vol. 33, p. 352, to amend and ratify agreement of Aug. 14, 1899. Under act of Feb. 8, 1887 (24 Stat., 388), and act Feb. 28, 1891 (26 Stat., 791), and Executive order, June 8, 1901 (modifying Executive order of Mar. 25, 1901), 482,584 acres have been allotted to 2,453 Indians, and 1,822.61 acres reserved for administration, church, and cemetery purposes, leaving unallotted and unreserved 1,832,109 acres; 14,711.96 acres on ceded part have been allotted to 81 Indians. (See L. B. 743, p. 50; 852, p. 160, and 956, p. 416.) 37 Indians (Schedule A) have been allotted 7,429.55 acres under acts of Apr. 11, 1882 (22 Stat., 42), Feb. 8, 1887 (24 Stat., 388), and amendments thereto. President's proclamation, May 24, 1906 (34 Stat., 3200).
Fort Belknap (Under Fort Belknap School.) Tribes: Grosventre and Assiniboin.	622,917	Treaty of Oct. 17, 1855, vol. 11, p. 657; unratified treaties of July 18, 1866, and of July 13 and 15 and Sept. 1, 1868; Executive orders, July 5, 1873, and Aug. 19, 1874; act of Apr. 15, 1874, vol. 18, p. 28; Executive orders, Apr. 13, 1875, and July 13, 1880, and agreement made Jan. 21, 1887, approved by Congress May 1, 1888, vol. 25, p. 124; agreement made Oct. 9, 1895, approved by act of June 10, 1896, vol. 29, p. 350.
Fort Peck (Under Fort Peck School.) Tribes: Assiniboin, Brulé, Santee, Teton, Hunkpapa, and Yanktonal Sioux.		Treaty of Oct. 17, 1855, vol. 11, p. 657; unratified treaties of July 18, 1866, and of July 13 and 15 and of Sept. 1, 1868; Executive orders, July 5, 1873, and Aug. 19, 1874, act of Apr. 15, 1874, vol. 18, p. 28; Executive orders, Apr. 13, 1875, and July 13, 1880; and agreement made Dec. 28, 1886, approved by Congress May 1, 1888, vol. 25, p. 113, act May 30, 1908 (35 Stat., 558), 2,032 Indians allotted 724,695.77 acres; 1,225,949 acres surplus land opened to settlement and entry by President's proclamation July 25, 1913. (See 42 L. D. 264.) 1,032.84 acres reserved for town site, religious, and administrative purposes. Act Aug. 1, 1914 (38 Stat. 593), allotments to children. 126,054 acres allotted to 438 children, approved Nov. 13, 1917. Act Feb. 26, 1917 (Pub. 355). Sale to Great Northern R. R., and President's proclamation Mar. 21, 1917, rel. homestead entries on lands classified as coal.
Flathead (Under Flathead School.) Tribes: Bitter Root, Carlos Band, Flathead, Kutenai, Lower Kallis-pel, and Pend d'Oreille.		Treaty of July 16, 1855, vol. 12, p. 975. Under acts of Apr. 23, 1904 (33 Stats., 302), Feb. 8, 1887 (24 Stats., 388), and Feb. 28, 1891 (26 Stats., 794), 2,431 Indians have been allotted 227,113 acres, and under act of Apr. 23, 1904, 2,521.70 acres have been reserved for tribal uses, and under act of Apr. 23, 1904, as amended by act of Mar. 3, 1905 (33 Stats., 1049-1080), 6,774.92 acres have been reserved for agency purposes, 18,521.35 acres reserved for Bison Range under acts of May 23, 1908 (35 Stat. L., 267), and Mar. 4, 1909 (35 Stats., 927). See 51019-1908. May 22, 1909, proclamation issued by President opening surplus lands. Act Mar. 3, 1909 (35 Stats., 795). 45,714 acres reserved for power and reservoir sites, act Apr. 12, 1910 (36 Stats., 863). Executive order Jan. 14, 1913. Act June 25, 1910 (36 Stat., 803).
Northern Cheyenne (Under Tongue River School.) Tribe: Northern Cheyenne.	489,500	Executive orders, Nov. 26, 1884, and Mar. 19, 1900, act of Mar. 3, 1903, vol. 32, p. 1000.

1 Outboundaries surveyed; partly surveyed.

2 Surveyed.

3 Partly surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
MONTANA—continued.		
Rocky Boy's Agency	<i>Acres.</i> 56, 038	Part of Fort Assiniboine abandoned military reservation. Reserved by act Sept. 7, 1916 (39 Stat., 739), amending act of Feb. 11, 1915 (38 Stat., 807).
Total.....	3, 544, 311	
NEBRASKA.		
Niobrara (Under Yankton School, S. Dak.) Tribe: Santee Sioux.		Act of Mar. 3, 1863, vol. 12, p. 819, 4th paragraph, art. 6; treaty of Apr. 29, 1868, vol. 15, p. 637; Executive orders, Feb. 27, July 20, 1866, Nov. 16, 1867, Aug. 31, 1869, Dec. 31, 1873, and Feb. 9, 1885. 33,515.92 acres selected as homesteads, 38,951.71 acres selected as allotments, and 1,087 acres selected for agency, school, and mission purposes; unratified agreement of Oct. 17, 1882. (For modification, see sundry civil appropriation act approved Mar. 3, 1883, vol. 22, p. 624. For text, see misc. Indian doc., vol. 14, p. 305. Act of Apr. 30, 1888, vol. 25, p. 94, not accepted. Executive order Apr. 29, 1916.
Omaha (Under Omaha Agency.) Tribe: Omaha.	4, 420	Treaty of Mar. 16, 1854, vol. 10, p. 1043; selection by Indians with President's approval, May 11, 1855; treaty of Mar. 6, 1865, vol. 14, p. 667; acts of June 10, 1872, vol. 17, p. 391, and of June 22, 1874, vol. 18, p. 170; deed to Winnebago Indians, dated July 31, 1874; act of Aug. 7, 1882, vol. 22, p. 341; act of Mar. 3, 1893 (27 Stats., p. 612); 130,602 acres allotted to 1,460 Indians; the residue, 4,420 acres, unallotted; act May 6, 1910 (36 Stat., 348), taxation; act May 11, 1912 (37 Stats., 111), sale of surplus land.
Ponca (Under Yankton School, S. Dak.) Tribe: Ponca.		Treaty of Mar. 12, 1858, vol. 12, p. 997, and supplemental treaty, Mar. 10, 1865, vol. 14, p. 675; act of Mar. 2, 1889, sec. 13, vol. 25, p. 892. 27,226 acres allotted to 168 Indians; 160 acres reserved and occupied by agency and school buildings. (See letter book 205, p. 339; also, President's proclamation, Oct. 23, 1890, vol. 26, p. 1559.)
Sioux (additional) (Under Pine Ridge School.) Tribe: Oglala Sioux.	640	Executive order, Jan. 24, 1882.
Winnebago (Under Winnebago Agency.) Tribe: Winnebago.	1, 098	Act of Feb. 21, 1863, vol. 12, p. 658; treaty of Mar. 8, 1865, vol. 14, p. 671; act of June 22, 1874, vol. 18, p. 170; deed from Omaha Indians, dated July 31, 1874. (See vol. 6, Indian deeds, p. 215.) 122,374.20 acres allotted to 1,559 Indians; 480 acres reserved for agency, etc.; 610.10 acres sold; act July 4, 1888; the residue, 1,098 acres, unallotted; act May 6, 1910 (36 Stat., 348), taxation.
Total.....	6, 158	
NEVADA.		
Duck Valley (Under Western Shoshone School.) Tribes: Paiute and Western Shoshoni.	1 321, 920	Executive orders, Apr. 16, 1877, May 4, 1886, and July 1, 1910.
Moapa River (Under Moapa River School.) Tribes: Chemehuevi, Kalabab, Pawipit, Paiute, and Shivwits.	523	Executive orders, Mar. 12, 1873, and Feb. 12, 1874; act of Mar. 13, 1875, vol. 18, p. 445; selection approved by Secretary of the Interior, July 3, 1875; Executive orders of June 28, 1875, July 3, 1875, July 31, 1903, Oct. 28, 1912, and Nov. 26, 1912. 604.52 acres of irrigable land allotted to 117 Indians under general allotment act.
Paiute (Under Fallon School.)	960	7½ sections (4,640 acres) reserved under second form withdrawal, reclamation act, June 17, 1902 (32 Stats., 388), for reallocation to Indians; 3,730 acres have been allotted to 369 Paiute Indians and 10 acres reserved for school purposes (see 76082-1907); 960 acres unallotted and unreserved.
Paiute and Shoshone scattered bands.	280	Executive order, Sept. 16, 1912, setting aside 120 acres for allotment purposes; 160 acres added by Executive order Feb. 8, 1913.
Pyramid Lake (Under Nevada School.) Tribe: Paiute.	322, 000	Executive order, Mar. 23, 1874; act July 1, 1898 (30 Stats., 594). (See sec. 26, Indian appropriation act approved Apr. 21, 1904, vol. 33, p. 225.) Executive order Sept. 4, 1913, creating bird reserve out of Anaho Island.
Summit Lake, Paiute and Shoshone.	5, 025	Executive order, Jan. 14, 1913; withdrawing from settlement for use of Paiute-Shoshone 5,025.96 acres.

¹ Surveyed; partly in Idaho.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
NEVADA—continued.		
Walker River..... (Under Walker River School.) Tribe: Paiute.	Acres. 75,204	Executive order, Mar. 19, 1874; joint resolution of June 19, 1902, vol. 32, p. 744; act of May 27, 1902 (32 Stats., pp. 245, 260); act of Mar. 3, 1903, vol. 32, pp. 982-997; act of June 21, 1906, vol. 34, p. 325; proclamation of President, Sept. 26, 1906, opening ceded part to settlement. It contained 268,005.84 acres. Allotted to 496 Indians, 9,878 acres; reserved for agency and school, 80 acres; reserved for cemetery, 40 acres; reserved for grazing, 37,818.29 acres; reserved for timber, 3,355.62 acres; reserved for church purposes, 160 acres. (L. B., 885, p. 187.) 34,000 acres added to reserve by Executive order Mar. 15, 1918.
Winnemucca and Battle Mountain Bands of Shoshone.	840	Executive order, June 18, 1917, setting aside 840 acres of public domain for 2 bands of homeless Indians.
Total.....	726,752	
NEW MEXICO.		
Jicarilla Apache..... (Under Jicarilla School.) Tribe: Jicarilla Apache.	407,300	Executive orders, Mar. 25, 1874, July 18, 1876, Sept. 21, 1880, May 15, 1884, and Feb. 11, 1887; 129,313.35 acres allotted to 845 Indians and 280.44 acres reserved for mission, school, and agency purposes. (L. B. 335, p. 323.) Executive orders of Nov. 11, 1907, and Jan. 28, 1908. The above-mentioned 845 allotments have been canceled; reallocations have been made under the act of Mar. 1, 1907 (34 Stat L., 1413). (See 64513-1909.) (Allotments to 797 Indians covering 354,294 acres approved Aug. 28, 1909.)
Mescalero Apache..... (Under Mescalero School.) Tribes: Mescalero and Mimbreno Apache.	474,240	Executive orders, May 29, 1873, Feb. 2, 1874, Oct. 20, 1875, May 19, 1882, and Mar. 24, 1883. (See 25961, 49680, 75169, 75469-1906, and 14203, 26542-1909 and Senate bill 5602, 60th Cong., 1st sess.)
Navajo.....	49,244	Executive order, Jan. 15, 1917, setting aside 49,244 acres for Navajo and other Indians.
Pueblo: (Under Santa Fe and Albuquerque Schools.) Tribe: Pueblo—		
Jemez.....	1 42,359	Confirmed by United States patents in 1864, under old Spanish grants; acts of Dec. 22, 1858, vol. 11, p. 374, and June 21, 1860, vol. 12, p. 71. (See General Land Office Report for 1876, p. 242, and for 1880, p. 658.) See Executive orders of June 13 and Sept. 4, 1902, setting apart additional lands for San Felipe and Nambe Pueblos, and Executive order of July 29, 1905, setting apart additional lands for Santa Clara Pueblo. (See 60806-1905.) Approximately 32,000 acres added. Area original Santa Clara Pueblo, 17,368.52. Executive orders, Dec. 19, 1906, Sept. 1, 1911, and Oct. 4, 1915, withdrawing 23,900 acres for Jemez Indians. Area of original Spanish grant, 17,510 acres. Executive order, July 1, 1910, 28,800 acres. Area of Pueblo proper, 125,225. (See 55714-1910.) Total area Pueblos, including Zuni and Executive order res'n, 1,008,346. Resurveys 33149-14. Executive order, Mar. 21, 1917, setting aside acres for Indians of Laguna Pueblo.
Acoma.....	1 95,792	
San Juan.....	1 17,545	
Picuris.....	1 17,461	
San Felipe.....	1 34,767	
Cochiti.....	1 24,256	
Santo Domingo.....	1 92,398	
Taos.....	1 17,361	
Santa Clara.....	1 49,369	
Tesuque.....	1 17,471	
San Ildefonso.....	1 17,233	
Pojoaque.....	1 13,520	
Sia.....	1 17,515	
San Dia.....	1 24,187	
Isleta.....	1 110,080	
Nambe.....	1 13,586	
Laguna.....	1 101,511	
Laguna withdrawals.....	150,000	
Santa Ana.....	1 17,361	
Santa Ana or El Ranchito.	1 4,945	
Zuni..... (Under Zuni School.) Tribe: Zuni Pueblo.	1 288,040	Executive orders, Mar. 16, 1877, May 1, 1883, and Mar. 3, 1885. Irrigable lands surveyed. (Area of original Spanish grant, 17,581.25 acres.) Approximately 73,000 acres added to Pueblo by Executive order of Nov. 30, 1917.
Total.....	2,097,601	
NEW YORK.		
Allegany..... (Under New York Agency.) Tribes: Onondaga and Seneca.	1 30,469	Treaties of Sept. 15, 1797, vol. 7, p. 601, and of May 20, 1842, vol. 7, p. 587.
Cattaraugus..... (Under New York Agency.) Tribes: Cayuga, Onondaga, and Seneca.	1 21,680	Treaties of Sept. 15, 1797, vol. 7, p. 601; June 30, 1802, vol. 7, p. 70, and of May 20, 1842, vol. 7, p. 587. (See Ann. Rept., 1877, p. 164.)
Oil Spring..... (Under New York Agency.) Tribe: Seneca.	1 640	By arrangement with the State of New York. (See Ann. Rept., 1877, p. 166.) Seneca agreement of Jan. 3, 1893, ratified by act of Feb. 20, 1893, vol. 27, p. 470; act of June 7, 1897, vol. 30, p. 89.

1 Outboundaries surveyed.

2 Partly surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
NEW YORK—continued.		
Oneida. (Under New York Agency.) Tribe: Oneida.	Acres. 1,350	Treaty of Nov. 11, 1794, vol. 7, p. 44, and arrangement with the State of New York. (See Ann. Rept., 1877, p. 168.)
Onondaga. (Under New York Agency.) Tribes: Oneida, Onondaga, and St. Regis.	6,100	Do.
St. Regis. (Under New York Agency.) Tribe: St. Regis.	14,640	Treaty of May 13, 1796, vol. 7, p. 55. (See Ann. Rept., 1877, p. 168.) They hold about 24,250 acres in Canada.
Tonawanda. (Under New York Agency.) Tribes: Cayuga and Tonawanda Bands of Seneca.	17,549	Treaties of Sept. 15, 1797, vol. 7, p. 601, and Nov. 5, 1857, vol. 12, p. 991; purchased by the Indians and held in trust by the comptroller of New York; deed dated Feb. 14, 1862. (See also Ann. Rept., 1877, p. 165.)
Tuscarora. (Under New York Agency.) Tribes: Onondaga and Tuscarora.	6,249	Treaty of Jan. 15, 1838, vol. 7, p. 551, and arrangement (grant and purchase) between the Indians and the Holland Land Co. (See Ann. Rept., 1877, p. 167.)
Total.....	87,677	
NORTH CAROLINA.		
Qualla boundary and other lands. (Under Eastern Cherokee School.) Tribe: Eastern Band of Cherokee.	{ 48,000 15,211	Held by deed to Indians under decision of U. S. Circuit Court for Western District of North Carolina, entered at November term, 1874, confirming the award of Rufus Barringer and others, dated Oct. 23, 1874, and acts of Aug. 14, 1876, vol. 19, p. 139, and Aug. 23, 1894, vol. 28, p. 441, and deeds to Indians from Johnston and others, dated Oct. 9, 1876, and Aug. 14, 1880. (See also H. Ex. Docs. No. 196, 47th Conf., 1st sess., and No. 128, 53d Cong., 2d sess.) Now held in fee by Indians, who are incorporated. Act of Mar. 3, 1903, vol. 32, p. 1000. (See Opinions of Asst. Atty. Gen., Mar. 14, 1894, and Feb. 3, 1904.) 35,000 acres of the 98,211 acres sold. Deeds dated Oct. 4, 1906; approved Dec. 12, 1906.
Total.....	63,211	
NORTH DAKOTA.		
Devils Lake. (Under Fort Totten School.) Tribes: Assinibolin, Cuthead, Santee, Sisseton, Yankton, and Wahpeton Sioux.		Treaty of Feb. 19, 1867, vol. 15, p. 505, agreement Sept. 20, 1872; confirmed in Indian appropriation act approved June 22, 1874, vol. 18, p. 167. (See pp. 328-337, Comp. Indian Laws.) 137,381 acres allotted to 1,189 Indians; 727.83 acres reserved for church and 193.01 acres reserved for Government purposes. Act of Apr. 27, 1904, vol. 33, p. 319, to amend and ratify agreement made Nov. 2, 1901. President's proclamation of June 2, 1904, vol. 33, p. 2368. Trust period extended 10 years. Executive order, Feb. 11, 1918.
Fort Berthold. (Under Fort Berthold School.) Tribes: Arikara, Grosventre, and Mandan.	100,000	Unratified agreement of Sept. 17, 1851, and July 27, 1866 (see Laws relating to Indian Affairs, Department of Interior, 1883), pp. 317 and 322; Executive orders, Apr. 12, 1870, July 13, 1880, and June 17, 1892; agreement Dec. 14, 1886, ratified by act of Mar. 3, 1891, vol. 26, p. 1032. (See Pres. proc. May 20, 1891, vol. 27, p. 979.) 229,634.91 acres allotted to 1,379 Indians (see letter book 445, p. 311.) Under acts of Mar. 1, 1907 (34 Stat. L., 1042), and June 1, 1910 (36 Stat. L., 455), 532 allotments, aggregating 35,687 acres, were approved Aug. 15, 1910; 579 allotments, aggregating 112,544 acres, were approved Apr. 5, 1912; and 787 allotments, aggregating 206,154 acres, were approved Nov. 29, 1915. (See 61502-1910, proclamation June 29, 1911 (40 L. D., 151), 227,504 acres open; see H. J. Res. Apr. 3, 1912 (37 Stat. L., 631), and proclamation of Sept. 17, 1915, opening surface of lands classified as coal to homestead entry, authorized by act of Aug. 3, 1914 (38 Stat. L., 681).)
Standing Rock. (Under Standing Rock School.) Tribes: Blackfeet, Hunkpapa, Upper and Lower Yanktonai Sioux.		Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders Jan. 11-Mar. 16, 1875, and Nov. 28, 1876. Agreement ratified by act of Feb. 28, 1877, vol. 19, p. 254, and Executive orders Aug. 9, 1879, and Mar. 20, 1884 (1,520,640 acres in South Dakota); unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1883, vol. 22, p. 624; for text see Misc. Indian Doc., vol. 14, p. 305.) Act of Congress of Apr. 30, 1888, vol. 25, p. 94, not accepted. Act of Congress, Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. Under acts Mar. 2, 1889, supra, Mar. 1, 1907 (34 Stat. L., 1041), May 29, 1908 (35 Stat. L., 451-460), and Feb. 14, 1913 (37 Stat. L., 675), 4,717 Indians have been allotted 1,388,612 acres. Under President's proclamation of Aug. 19, 1908 (36 Stat. L., 2500), 1,061,500 acres were opened to settlement. Remainder of lands opened to settlement by proclamation Mar. 15, 1915, as authorized by act Feb. 14, 1913 (37 Stat. L., 675, 680).

1 Partly surveyed.

2 Surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
NORTH DAKOTA—continued.		
Turtle Mountain (Under Turtle Mountain Agency.) Tribe: Pembina Chippewa.	Acres.	Executive orders, Dec. 21, 1882, Mar. 29 and June 3, 1884. Agreement made Oct. 2, 1892, amended by Indian appropriation act approved and ratified Apr. 21, 1904, vol. 33, p. 194. 43,820 acres allotted to 326 Indians and 186 acres reserved for church and school purposes under the above-named act. Allotments to 2,691 members of this band on public domain aggregating 399,817.52 acres have been approved.
Total.....	100,000	
OKLAHOMA.		
Apache. (Under Kiowa School.)		Formerly Fort Sill. (See Executive order Feb. 26, 1897.) Act Mar. 3, 1901 (31 Stat., 1173); act June 28, 1902 (32 Stat., 467). Ex. Dec. No. 117, 49th Cong., 2d sess., act Aug. 24, 1912 (37 Stat., 534); act June 30, 1913 (38 Stat., 92). Lands to be purchased for those members of this band, some 60 in number, who elected to remain in Oklahoma.
Cherokee. (Under superintendent Five Civilized Tribes.)	19	Treaty with Western Cherokees at city of Washington, May 6, 1828 (7 Stat., 311), as amended by the treaty at Fort Gibson of Feb. 14, 1833 (7 Stat., 414); referred to in treaty with Cherokees at New Echota, Ga., Dec. 29, 1835 (7 Stat., 478); July 19, 1836 (14 Stat., 799), as supplemented by treaty of Apr. 27, 1868 (16 Stat., 727). Agreement of July 1, 1902 (32 Stat., 716). Approximately 41,824 Cherokees, including 4,919 freedmen, were allotted an average of 110 acres, 40 acres of which was a homestead to be nontaxable, while held by the original allottee. Total acreage allotted 4,346,223; sold, 50,955; remaining unsold, 10.
Cherokee Outlet.		Agreement of Dec. 19, 1891; ratified sec. 10 by act of Mar. 3, 1893 (27 Stat., 640), unoccupied part of Cherokee Outlet, not included in Territory of Oklahoma (26 Stat., 81). 62 Indians allotted 4,949.45 acres under act of Mar. 3, 1893.
Cheyenne and Arapaho. (Under Cheyenne and Arapaho, Cantonment, and Sayer Schools.) Tribes: Southern Arapaho and Northern and Southern Cheyenne.		Executive order, Aug. 10, 1899; unratified agreement with Wichita, Caddo, and others, Oct. 19, 1872. (See Ann. Rept., 1872, p. 101.) Executive orders of Apr. 18, 1882, and Jan. 17, 1883, relative to Fort Supply Military Reserve (relinquished for disposal under act of Congress of July 5, 1894, by authority of Executive order of Nov. 5, 1894; see General Land Office Report, 1899, p. 158). Executive order of July 17, 1883, relative to Fort Reno Military Reserve. Agreement made October, 1890, and ratified and confirmed in Indian appropriation act approved Mar. 3, 1891, vol. 26, pp. 1022-1028. 528,789 acres allotted to 3,331 Indians; 231,828.55 acres for Oklahoma school lands; 32,343.13 acres reserved for military, agency, mission, etc., purposes; the residue, 3,500,562.05 acres, opened to settlement. (See Pres. proc. Apr. 12, 1892, vol. 27, p. 1018.) Executive order, July 12, 1895. President's proclamation of Aug. 12, 1903, vol. 33, p. 2317. Act of June 17, 1910 (34 Stat., 533), 57,637.10. Executive order, Dec. 29, 1915, setting aside 40 acres for agency and school purposes.
Chickasaw. (Under superintendent Five Civilized Tribes, Muskogee, Okla.)	10	Treaty of June 22, 1855, vol. 11, p. 611; agreement of Apr. 23, 1897, ratified by act of June 23, 1898, vol. 30, p. 505; act of July 1, 1902, vol. 32, p. 641, ratifying agreement of Mar. 21, 1902; act of Apr. 21, 1904, vol. 33, p. 209; act of Apr. 28, 1904, vol. 33, p. 544. 10,966 Indians have been allotted 3,800,190 acres; sold, 570,255; remaining unsold, 10 acres.
Choctaw. (Under superintendent Five Civilized Tribes, Muskogee Okla.)	5,142	Treaty of June 22, 1855, vol. 11, p. 611. Same as Chickasaw. Approximately 28,828 Indians have been allotted 4,291,036 acres; sold, 2,587,817 acres; unsold, 5,992 acres. There remain unsold also the coal and asphalt deposits within the segregated coal and asphalt area of the Choctaw and Chickasaw Nations.
Creek. (Under superintendent Five Civilized Tribes, Muskogee, Okla.)	320	Treaties of Feb. 14, 1883, vol. 7, p. 417, and June 14, 1886, vol. 14, p. 785, and the deficiency appropriation act of Aug. 5, 1882, vol. 22, p. 265. (See Ann. Rept. 1882, p. liv.) Agreement of Jan. 19, 1889, ratified by the act of Mar. 1, 1893, vol. 25, p. 757; President's proclamation, Mar. 23, 1889, vol. 26, p. 1544; agreement of Sept. 27, 1897, ratified by act of June 28, 1898, vol. 30, p. 514; agreement of Mar. 8, 1900, ratified by act of Mar. 1, 1901, vol. 31, p. 801; President's proclamation of June 25, 1901, vol. 32, p. 1971; supplemental agreement of June 30, 1902, vol. 32, p. 400; President's proclamation of Aug. 8, 1902, vol. 32, p. 2021. (See act of May 27, 1902, vol. 32, p. 258; act of Apr. 21, 1904, vol. 33, p. 204.) Approximately 18,761 Indians have been allotted 2,997,114 acres; sold, 65,645 acres; remaining unsold, 320 acres.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
OKLAHOMA—continued.		
Iowa. (Under Sac and Fox School.) Tribe: Iowa and Tonkawa.	<i>Acres.</i>	Executive order, Aug. 15, 1883; agreement May 20, 1890, ratified by act of Feb. 13, 1891, vol. 26, p. 763. 8,606 acres allotted to 108 Indians; 20 acres held in common for church, school, etc.; the residue opened to settlement. Proclamation of President Sept. 18, 1891, vol. 27, p. 989. (See Ann. Rept. 1891, p. 677, and letter book 222, p. 364.)
Kansa or Kaw. (Under Ponca School.) Tribe: Kansa or Kaw.		Act of June 5, 1872, vol. 17, p. 228. 260 acres reserved for cemetery, school, and town site. Remainder, 99,644 acres, allotted to 247 Indians; act of July 1, 1902, vol. 32, p. 636, ratifying agreement, not dated. Act Mar. 3, 1909. (35 Stat., 778.)
Kickapoo (Under Shawnee School.) Tribe: Mexican Kickapoo.		Executive order, Aug. 15, 1883; agreement June 21, 1891; ratified by act of Mar. 3, 1893, vol. 27, p. 557. 22,650 acres allotted to 280 Indians; 479.72 acres reserved for mission, agency, and school purposes; residue opened to settlement by proclamation of the President May 18, 1895, vol. 29, p. 868; act of Mar. 3, 1903, vol. 32, p. 1001. June 21, 1906. (34 Stat., 362.)
Kiowa and Comanche. (Under Kiowa Agency.) Tribe: Apache, Comanche, Delaware, and Kiowa.		Treaty of Oct. 21, 1867, vol. 15, pp. 581 and 589; agreement made Oct. 6, 1892; ratified by act of June 6, 1900, vol. 31, p. 676, ceding 2,488,893 acres, of which 445,000 acres have been allotted to 3,444 Indians; 11,972 acres reserved for agency, school, religious, and other purposes. The residue 2,033,583 acres, opened to settlement (letter books, 486, p. 440; 488, p. 478). President's proclamation of July 4, 1901, vol. 32, p. 1975; June 23, 1902, vol. 32, p. 2007; Sept. 4, 1902, vol. 32, p. 2026; and Mar. 29, 1904, vol. 33, p. 2340. Of the 480,000 acres grazing land set apart under act of June 6, 1900, 1,841.92 acres were reserved for town sites under act Mar. 20, 1906 (34 Stat. L., 801), 82,059.52 acres were allotted to 513 Indians under act of June 5, 1906 (34 Stat. L., 213), and 480 acres allotted to 3 Indians under act of June 5, as amended by act Mar. 1, 1907 (34 Stat. L., 1018). The General Land Office reports the sale and entry of approximately 401,465.92 acres under act of June 5, and of 21,251.75 acres under act of June 28, 1906, to June 30, 1911. (See 87404-1909.) (See 75344-1908.) Under act May 29, 1908 (35 Stat., 471), and act June 25, 1910 (36 Stat., 861), 20,498 acres allotted to 169 Indians. Sale of unused, unreserved lands, act Mar. 3, 1911 (36 Stat., 1059). Act Mar. 4, 1915, Department of Agriculture experiment station. Sale of school and agency reserves, act June 30, 1913 (38 Stat., 92).
Fort Bill Apaches. (Under Kiowa School.)		Formerly prisoners of war, remnants and descendants of Chief Geronimo's Band. 6,149 acres of inherited Kiowa, Comanche, and Apache lands were purchased by the United States for allotment to 81 Indians and 3 whites of this band, who elected to remain in Oklahoma. (187 of the band removed to Mesquero. See Ann. Rept. 1913.) These lands were purchased under the acts of June 25, 1910 (36 Stat., 855), Aug. 24, 1912 (37 Stat., 534), appropriating \$200,000; June 30, 1913 (38 Stat., 94), appropriating \$100,000; and Aug. 1, 1914 (38 Stat., 587). See Executive order Feb. 26, 1897, act Mar. 3, 1901 (31 Stat., 1173); act June 28, 1902 (32 Stat., 467); Ex. Doc. No. 117, 49th Cong., 2d sess.
Modoc. (Under Seneca School.) Tribe: Modoc.		Agreement with Eastern Shawnees made June 23, 1874 (see Ann. Rept. 1882, p. 271), and confirmed in Indian appropriation act approved Mar. 8, 1875, vol. 18, p. 447. Lands all allotted—3,966 acres allotted to 68 Indians, 8 acres reserved for church and cemetery purposes, 2 acres for school, and 24 acres for timber. (Letter book 220, p. 102.) Act Mar. 3, 1900. (35 Stat., 752.) Ex. order Sept. 14, 1916, extending trust period 10 years with exception of 12 allottees. Act of May 27, 1878, vol. 20, p. 84. (See Ann. Rept. for 1882, p. LXII.) (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 476.) (See deed from Nez Perce, May 22, 1885, vol. 6, Indian Deeds, p. 504.) 11,456 acres allotted to 73 Indians; 160.50 acres reserved for Government and school purposes. The residue, 79,276.60 acres, opened to settlement. (Letter book 257, p. 240.) Agreement made Oct. 21, 1891, ratified by Indian appropriation act approved Mar. 3, 1893, vol. 27, p. 644. (For text, see Ann. Rept., 1893, p. 524.) Trust period extended 10 years on 27 allotments, Executive order, May 24, 1918.
Oakland. (Under Ponca School.) Tribe: Tonkawa and Lipan.		

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
OKLAHOMA—continued.		
Osage (Under Osage School.) Tribes: Great and Little Osage.	<i>Acres.</i>	Article 16, Cherokee treaty of July 19, 1866, vol. 14, p. 804; order of Secretary of the Interior, Mar. 27, 1871; act of June 5, 1872, vol. 17, p. 228. (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 482.) (See act of June 28, 1906 (34 Stat., 539), act of Mar. 3, 1909 (35 Stat., 787), and Public Resolution No. 51, approved Feb. 28, 1909.) 2,230 Indians have been allotted 1,065,134.31 acres (3 selections). Since July 1, 1909, these 2,230 Indians have been allotted 1,465,350 acres from surplus lands, and 5,178.53 acres have been reserved for church, town-site, and railroad purposes. Act Mar. 3, 1909 (35 Stat., 778). Act Apr. 18, 1912 (37 Stat., 86), and Executive order June 1, 1914, rates of royalty on oil.
Otoe (Under Otoe School.) Tribes: Oto and Missouri.		Act of Mar. 3, 1881, vol. 21, p. 381; order of the Secretary of the Interior, June 25, 1881. (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 479. Under acts of Feb. 8, 1887 (24 Stats., 388), Feb. 28, 1891 (26 Stats., 794), and Apr. 21, 1904 (33 Stats., 189), 128,251 acres were allotted to 514 Indians (835 allotments—see letter book 929, p. 326), 720 acres were reserved for agency, school, church, and cemetery purposes, and 640 acres set aside for tribal uses. Also act June 22, 1910 (36 Stats., 580-581).
Ottawa (Under Seneca School.) Tribe: Ottawa of Blanchards Fork and Roche de Boeuf.		Treaty of Feb. 23, 1867, vol. 15, p. 513; 12,995 acres were allotted to 160 Indians; 557.95 acres were authorized to be sold by act of Mar. 3, 1891 (vol. 26, p. 989). The residue, 1,587.25 acres sold. Letter book 229, p. 115, and act Mar. 3, 1909 (35 Stat., 752).
Pawnee (Under Pawnee School.) Tribe: Pawnee.		Act of Apr. 10, 1876, vol. 19, p. 29. Of this, 230,014 acres are Cherokee and 53,006 acres are Creek lands. (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 470.) 112,701 acres allotted to 820 Indians; 840 acres were reserved for school, agency, and cemetery purposes; the residue, 169,320 acres, opened to settlement. (Letter books 261, p. 388, and 263, p. 5.) Agreement made Nov. 23, 1892, ratified by act of Mar. 3, 1893, vol. 27, p. 644. (For text see Ann. Rept., 1893, p. 526.) Trust period extended 10 years. Executive order, Mar. 2, 1918.
Peoria (Under Seneca School.) Tribes: Kaskaskia, Miami, Peoria, Piankashaw, and Wea.		Treaty of Feb. 23, 1867, vol. 15, p. 513. 43,334 acres allotted to 218 Indians. The residue, 6,313.27 acres, sold under act of May 27, 1902 (32 Stats., 245).
Ponca (Under Ponca School.) Tribe: Ponca.	1 387	Acts of Aug. 15, 1876, vol. 19, p. 192; Mar. 3, 1877, vol. 19, p. 287; May 27, 1878, vol. 20, p. 76; and Mar. 3, 1881, vol. 21, p. 422. (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 473.) There have been allotted to 782 Indians 100,734 acres, and reserved for agency, school, mission, and cemetery purposes 523.56 acres, leaving unallotted and unreserved 387 acres. (Letter books 302, p. 311, and 813, p. 401.) Indian appropriation act approved Apr. 21, 1904, vol. 33, p. 217. (See 38067-1915.)
Potawatomi (Under Shawnee School.) Tribes: Absentee Shawnee and citizen Potawatomi.		Treaty of Feb. 27, 1867, vol. 15, p. 531; act of May 23, 1872, vol. 17, p. 159. (222,716 acres are Creek ceded lands; 365,851 acres are Seminole lands.) Agreements with citizen Potawatomi June 25 and absentee Shawnees June 26, 1890, ratified and confirmed in the Indian appropriation act of Mar. 3, 1891, vol. 26, pp. 1016-1021. 215,899.42 acres allotted to 1,400 Potawatomi, and 70,791.47 acres allotted to 563 absentee Shawnees, and 510.63 acres reserved for Government purposes; the residue opened to settlement by the President's proclamation of Sept. 18, 1891, vol. 27, p. 931. (See letter book 222, p. 442, 444, and Ann. Rept. for 1891, p. 677.) Executive order Nov. 24, 1916, and Jan. 15, 1917, extending trust period 10 years with exception of 15 absentee Shawnees, 85 citizen Potawatomi.
Quapaw (Under Seneca School.) Tribe: Quapaw.		Treaties of May 13, 1833, vol. 7, p. 424, and of Feb. 23, 1867, vol. 15, p. 513. 56,245.21 acres allotted to 248 Indians, 400 acres reserved for school and 40 acres for church purposes. (Letter book 335, p. 326.) Agreement of Mar. 23, 1893, ratified in Indian appropriation act approved Mar. 2, 1895, vol. 28, p. 907. Agreement of Jan. 2, 1899, ratified in Indian appropriation act approved Mar. 3, 1901, vol. 31, p. 1067. Act of Mar. 3, 1903, vol. 32, p. 997.

1 Surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
OKLAHOMA—continued.		
Sauk and Fox. (Under Sac and Fox School.) Tribes: Ottawa, Sauk, and Fox of the Mississippi.	<i>Acres.</i>	Treaty of Feb. 18, 1867, vol. 15, p. 495; agreement June 12, 1890; ratified by act of Feb. 13, 1891, vol. 26, p. 749. 87,583.40 acres allotted to 548 Indians, and 800 acres reserved for school and agency purposes; the residue opened to settlement by the President's proclamation Sept. 18, 1891, vol. 27, p. 989. (See letter book 222, p. 189, and Ann. Rept. for 1891, p. 677.) Trust period extended for 10 years by Executive order of Mar. 27, 1896; again by Executive order of Aug. 28, 1906; again by Executive order of Aug. 1, 1916, with exception of 55 allottees.
Seminole. (Under superintendent Five Civilized Tribes, Muskogee, Okla.)	122	Treaties of Mar. 21, 1836, vol. 14, p. 755. (See Creek agreement of Feb. 14, 1881, Ann. Rept. 1882, p. 54, and deficiency act of Aug. 5, 1882, vol. 22, p. 265.) Agreement of Mar. 16, 1889. (See Indian appropriation act approved Mar. 2, 1889.) Agreement recorded in the treaty book, vol. 3, p. 35; agreement made Dec. 16, 1897, ratified by the act of July 1, 1898, vol. 30, p. 567; agreement of Oct. 7, 1899, ratified by act of June 2, 1900, vol. 31, p. 250. Approximately 3,127 Indians have been allotted 355,832 acres; sold, 4,263 acres; remaining unsold, 122 acres.
Seneca. (Under Seneca School.) Tribes: Seneca, Eastern Shawnee, Wyandot, Peoria, etc.		Treaties of Feb. 28, 1831, vol. 7, p. 348; of Dec. 29, 1832, vol. 7, p. 411, and of Feb. 23, 1867, vol. 15, p. 513. 41,813 acres allotted to 435 Indians; 40.22 acres reserved for Government, church, and school purposes. Agreement of Dec. 2, 1901, ratified by act of May 27, 1902, vol. 32, p. 262; Executive order Feb. 15, 1916, extending trust period for 10 years, with exception of 44 allottees.
Shawnee. (Under Seneca School.) Tribes: Seneca, Absentee Shawnee, Mexican Kickapoo.		Treaties of July 20, 1831, vol. 7, p. 351; of Dec. 29, 1832, vol. 7, p. 411; of Feb. 23, 1867, vol. 15, p. 513, and agreement with Modocs, made June 23, 1874 (see Ann. Rept., 1882, p. 271), confirmed by Congress in Indian appropriation act approved Mar. 3, 1875, vol. 18, p. 447. 12,745 acres allotted to 117 Indians; 86 acres reserved for agency purposes (letter books 208, p. 266, and 233, p. 207); the residue, 2,543 acres, sold (agreement of Dec. 2, 1901, ratified by act of May 27, 1902, vol. 32, p. 262).
Wichita. (Under Kiowa Agency.) Tribes: Ioni, Caddo, Comanche, Delaware, Towakoni, Waco, and Wichita.		(See treaty of July 4, 1866, with Delawares, art. 4, vol. 14, p. 794.) Unratified agreement, Oct. 19, 1872. (See Ann. Rept., 1872, p. 101.) Agreement made June 4, 1891, ratified by act of Mar. 2, 1895, vol. 28, p. 895. 152,714 acres allotted to 957 Indians; 4,151 acres reserved for agency, school, religious, and other purposes. The residue, 596,466 acres, opened to settlement (letter book 490, p. 90.) President's proclamation of July 4, 1901, vol. 32, p. 1975. Unoccupied Chickasaw and Choctaw leased lands west of the North Fork of the Red River. Act of May 4, 1896, vol. 29, p. 113. President's proclamation, Mar. 16, 1896, vol. 29, p. 878. Act of June 6, 1900 (31 Stat., 680).
Wyandot. (Under Seneca School.) Tribe: Wyandot.		Treaty of Feb. 23, 1867, vol. 15, p. 513. 20,942 acres allotted to 244 Indians, 16 acres to churches, etc., leaving 534.72 acres unallotted (letter book 228, p. 332.) Unallotted land sold, act Mar. 3, 1909 (35 Stat., 752). Act Apr. 28, 1904 (33 Stat., 519), allotments on public domain to absentee Wyandot.
Total.	6,841	
OREGON.		
Grande Ronde. (Under Siletz Agency.) Tribes: Kalapuya, Clackamas, Cow Creek, Lakmiut, Marys River, Molala, Nestucca, Rogue River, Santiam, Shasta, Tumwater, Umpqua, Wapato, and Yamhill.		Treaties of Jan. 22, 1855, vol. 10, p. 1143, and of Dec. 21, 1855, vol. 12, p. 982; Executive order June 30, 1857. 440 acres reserved for Government use and 32,983 acres allotted to 269 Indians. (See letter book 210, p. 328.) Act of Apr. 28, 1904, vol. 33, p. 567, amending and ratifying agreement of June 27, 1901 (33 L. D., 586). Executive order Apr. 29, 1916, extending trust period 10 years with exception of 66 allottees.
Klamath. (Under Klamath School.) Tribes: Klamath, Modoc, Paiute, Pit River, Walpapa, and Yahoeskin Band of Snake (Shoshoni).	¹ 812,547	Treaty of Oct. 14, 1864, vol. 16, p. 707. Act June 10, 1896 (29 Stat., 321). Act of May 27, 1902 (32 Stat., 200). 208,439 acres allotted to 1,352 Indians; 6,094.77 acres reserved for agency, school, and church purposes. Indian appropriation act approved Apr. 21, 1904, vol. 33, p. 202; act of Mar. 3, 1905, vol. 33, p. 1033, and act of June 21, 1906 (34 Stat., 367). (See act of Mar. 3, 1909 (35 Stat., L. 752), removal of Modocs in Oklahoma to Klamath and allotments thereto. Boundary dispute (see 9681-1911).)

¹ Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
OREGON—continued.		
Siletz. (Under Siletz Agency.) Tribes: Aisen, Coquille, Kusan, Kwawami, Rogue River, Skoton, Shasta, Salustika, Siu-slaw, Tututini, Umpqua, and 13 others.	<i>Acres.</i>	Unratified treaty, Aug. 11, 1855; Executive orders Nov. 9, 1855, and Dec. 21, 1855, and act of Mar. 3, 1875, vol. 18, p. 446. Agreement Oct. 31, 1892, ratified by act of Aug. 15, 1894, vol. 28, p. 323. 44,459 acres allotted to 551 Indians. Residue, 177,533.66 acres (except 5 sections), ceded to United States. (See letter book 281, p. 358.) President's proclamation, May 16, 1895, vol. 29, p. 866. Acts of May 31, 1900, vol. 31, p. 233, and Mar. 3, 1901, vol. 31, p. 1085. Act of May 13, 1910 (36 Stat., 367). Executive order July 19, 1915.
Umatilla. (Under Umatilla School.) Tribes: Cayuse, Umatilla, and Wallawalla.	174,032	Treaty of June 9, 1855, vol. 12, p. 945, and act of Aug. 5, 1882, vol. 22, p. 297; Mar. 3, 1885, vol. 23, p. 340, and sec. 8 of act of Oct. 17, 1888, vol. 25, p. 559. (See orders Secretary of Interior, Dec. 4, 1888, Ann. Rept., 1891, p. 682.) 82,742 acres allotted to 1,118 Indians, 980 acres reserved for school and mission purposes. (See letter book 255, p. 132.) Act of July 1, 1902, vol. 32, p. 730; act Mar. 2, 1917 (39 Stat. 969-86), providing for allotments as long as any land is available.
Warm Springs. (Under Warm Springs School.) Tribes: Des Chutes, John Day, Paiute, Teneino, Warm Springs, and Wasco.	132,275	Treaty of June 25, 1855, vol. 12, p. 963. 140,529 acres allotted to 968 Indians under the general allotment act of February 8, 1887 (24 Stat., 338), as amended, and 1,195 acres reserved for church, school, and agency purposes. Boundary dispute: Acts Aug. 19, 1890 (26 Stat., 355); June 6, 1894 (28 Stat., 86), and Mar. 2, 1917 (39 Stat., 969-986).
Total.	1,208,854	
SOUTH DAKOTA.		
Crow Creek and Old Winnebago. (Under Crow Creek School.) Tribes: Lower Yanktonal, Lower Brule, Miniconjou, and Two Kettle Sioux.		Order of department, July 1, 1863 (see Ann. Rept., 1863, p. 318); treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive order, Feb. 27, 1885 (see President's proclamation of Apr. 17, 1885, annulling Executive order of Feb. 27, 1885; Ann. Rept., 1885, p. 51); act of Mar. 2, 1889, vol. 25, p. 888; President's proclamation, Feb. 10, 1890, vol. 26, p. 1554. There have been allotted to 1,461 Indians 272,720 acres, and reserved for agency, school, and religious purposes 1,076.90 acres.
Lake Traverse. (Under Sisseton School.) Tribes: Sisseton and Wahpeton Sioux.		Treaty of Feb. 19, 1867, vol. 15, p. 605; agreement, Sept. 20, 1877; confirmed in Indian appropriation act approved June 22, 1874, vol. 18, p. 167. (See pp. 328-337, Comp. Indian Laws.) Agreement, Dec. 12, 1889, ratified by act of Mar. 3, 1891, vol. 26, pp. 1035-1038. 308,838 acres allotted to 2,006 Indians, 32,840.25 acres reserved for State school purposes, 1,347.01 acres for church and agency purposes; the residue, 574,678.40 acres, opened to settlement. (See President's proclamation, Apr. 11, 1892, vol. 27, p. 1017.) Trust period extended 10 years, Executive order of Apr. 16, 1914.
Cheyenne River. (Under Cheyenne River School.) Tribes: Blackfeet, Miniconjou, Sans Arcs, and Two Kettle Sioux.	219,206	Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders, Jan. 11, Mar. 16, and May 20, 1875, and Nov. 28, 1876; agreement ratified by act of Feb. 28, 1877, vol. 19, p. 254, and Executive orders, Aug. 9, 1879, and Mar. 20, 1884. Unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1893, vol. 22, p. 624, for text see Misc. Indian Docs., vol. 14, p. 305.) Act of Apr. 30, 1888, vol. 25, p. 94, not accepted. Act of Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. (See act of Feb. 20, 1896, vol. 29, p. 10.) President's proclamations of Feb. 7, 1903, vol. 32, p. 2035, and Mar. 30, 1904, vol. 33, p. 2340. 1,052,320.99 acres have been allotted to 3,880 Indians. (See L. B. 828, p. 321.) Act of May 29, 1908 (35 Stat. L., 460). Under President's proclamation of Aug. 19, 1909 (36 Stat., 2500), 1,158,010 acres were opened to settlement, leaving unallotted and unreserved 219,206 acres.
Lower Brule. (Under Lower Brule School.) Tribes: Lower Brule and Lower Yanktonal Sioux.	123,360	Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders Jan. 11, Mar. 16, and May 20, 1875, and Nov. 28, 1876; agreement ratified by act of Feb. 28, 1877, vol. 19, p. 254, and Executive orders, Aug. 9, 1879, and Mar. 20, 1884. Unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1893, vol. 22, p. 624, for text see Misc. Indian Docs., vol. 14, p. 305.) Act of Apr. 30, 1888, vol. 25, p. 94, not accepted. Act of Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. (See act of Feb. 20, 1896, vol. 29, p. 10.) Agreement made Mar. 1, 1898, ratified by act of Mar. 3, 1899, vol. 30, p. 1362, ceding 120,000 acres to the United States. 202,992 acres allotted to 869 Indians, and 964.06 acres reserved for agency, school, and religious purposes, leaving unallotted and unreserved 24,000 acres. (See letter book 498, p. 336.) (See act of Apr. 21, 1906, 34 Stats. 124 and 1048, and President's proclamations of Aug. 12, 1907, and Sept. 24, 1913.) (Superintendent's report June 11, 1918 [50,169-18].)

¹ Surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
SOUTH DAKOTA—continued.		
Pine Ridge (Under Pine Ridge Agency.) Tribes: Brulé, Sioux, Northern Cheyenne, and Ogalala Sioux.	<i>Acres.</i> 161,565	Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders, Jan. 11, Mar. 16, and May 20, 1875, and Nov. 28, 1876; agreement ratified by act of Feb. 28, 1877, vol. 19, p. 254, and Executive orders, Aug. 9, 1879, and Mar. 20, 1884. Unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1883, 22 Stats., 624; for text see Misc. Indian Docs., vol. 14, p. 305.) Act of Apr. 30, 1888 (25 Stats., 94), not accepted. Act of Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. (See act of Feb. 20, 1896, 29 Stats., 10.) A tract of 32,000 acres in Nebraska was set apart by Executive order of Jan. 24, 1882, and was restored to the public domain by Executive order of Jan. 25, 1904; and by Executive order of Feb. 20, 1904, 640 acres of this land was set apart for Indian school purposes and is called the Sioux additional tract. (See Nebraska.) Act of Mar. 2, 1889 (25 Stats., 888), authority of President of July 29, 1904, 2,229,803.81 acres have been allotted to 8,269 Indians and 11,333.68 acres reserved for agency, school, and church purposes, aggregating 866,323.19, leaving unallotted and unreserved 161,565 acres. Allotment under acts of Mar. 2, 1889 (25 Stat. L., 888), Mar. 1, 1907 (34 Stat. L., 1048), and May 29, 1908 (35 Stat. L., 451). Act May 27, 1910 (36 Stat., 440), 40,960 acres State school land; 22,434 acres timber reserved. President's proclamation, June 29, 1911 (40 L. D., 164), opening 169,592 acres May 1, 1912.
Rosebud (Under Rosebud School.) Tribes: Loafer, Miniconjou, Northern Oglalla, Two Kettle, Upper Brulé, and Wazhazhe Sioux.		Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders, Jan. 11, Mar. 16, and May 20, 1875, and Nov. 28, 1876; agreement ratified by act of Feb. 28, 1877, vol. 19, p. 254, and Executive orders, Aug. 9, 1879, and Mar. 20, 1884. Unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1883, vol. 22, p. 624; for text see Misc. Indian Docs., vol. 14, p. 305.) Act of Apr. 30, 1888, vol. 25, p. 94, not accepted. Act of Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. (See act of Feb. 20, 1896, vol. 29, p. 10.) 1,867,716 acres allotted to 8,585 Sioux Indians, 416,000 acres opened to settlement, 29,392.01 reserved for Government purposes, churches, cemeteries, etc. Agreement made Mar. 10, 1898, ratified by act of Mar. 3, 1899, vol. 30, p. 1384. Act of Apr. 23, 1904, vol. 33, p. 254, ratifying agreement made Sept. 14, 1901. President's proclamation of May 16, 1904, vol. 33, p. 2354. Act of Mar. 1, 1907 (34 Stat., 1048); act Mar. 2, 1907 (34 Stat., 1230); act May 29, 1908 (35 Stat., 451); act May 30, 1910 (36 Stat., 448); President's proclamation, Aug. 24, 1908 (35 Stat., 2203), opening 838,000 acres in Tripp County. President's proclamation, June 29, 1911 (40 L. D., 164), opening 300,000 acres in Mellette and Washabaugh Counties, 43,520 acres State school land Executive order, July 6, 1912.
Yankton (Under Yankton School.) Tribe: Yankton Sioux.		Treaty of Apr. 19, 1858, vol. 11, p. 744. 268,263 acres allotted to 2,613 Indians and 1,252.89 acres reserved for agency, church and school purposes. (See letter book 207, p. 1.) Agreement Dec. 31, 1882, ratified by act of Aug. 15, 1894, vol. 23, p. 314. The residue open to settlement. (See President's proclamation, May 16, 1895, vol. 29, p. 865.) Executive order Apr. 20, 1916, extending trust period 10 years, with exception of 162 allottees.
Total	404,131	
UTAH.		
Goshute and scattering bands.	34,500	Executive order, Mar. 23, 1914.
Palutes	7,000	Executive order, Aug. 2, 1915, reserving approximately 7,000 acres for use of Cedar City and Indian Peak Bands of Palutes.
Cedar City and Indian Peak Bands.		136.52 acres in Garfield County, Utah, purchased Nov. 1, 1903.
Panguitch		About 1 township in Washington County, Utah, withdrawn by departmental order based on office recommendation of Sept. 28, 1891 (L. B., 223, p. 270). Rights of squatters in withdrawal purchased by United States. (See also act of Mar. 3, 1891, 26 Stat., L., 989-1005.) Executive order Apr. 21, 1916, withdrawing 26,890 acres as Shebit or Shivwits Reservation.
Shivwits	26,890	

1 Unsurveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
UTAH—continued.		
Skull Valley.....	Acres, 18, 640	Reserved by Executive orders of Jan. 17, 1912, Sept. 7, 1917, and Feb. 15, 1918.
Uintah Valley..... (Under Uintah and Ouray Agency.) Tribes: Gosiute, Pavant, Uinta, Yampa, Grand River Uncompahgre, and White River Ute.	1 249, 340	Executive orders, Oct. 3, 1861; act of June 18, 1878 (20 Stats. 165); acts of May 5, 1864, vol. 13, p. 63, and May 24, 1883, vol. 25, p. 157; joint resolution of June 19, 1902, vol. 32, p. 744; act of Mar. 3, 1903, vol. 32, p. 997; Indian appropriation act approved Apr. 21, 1904, vol. 33, p. 207; President's proclamations of July 14, 1905, setting aside 1,010,000 acres as a forest reserve, 2,100 acres as town sites. 1,004,285 acres opened to homestead entry, 2,140 acres in mining claims; under act May 27, 1902 (32 Stats., 263), 99,407 acres allotted to 1,284 Indians, and 60,160 acres under reclamation, the residue, 179,194.65 acres, unallotted and unreserved. (See letter book 75, p. 398.) Executive order, Aug. 19, 1912, restoring lands of Fort Duchesne Military Reservation to the supervision of Interior Department.
Uncompahgre..... (Under Uintah and Ouray Agency.) Tribe: Tabaquache Ute.		Executive order, Jan. 5, 1882. (See act of June 15, 1890, ratifying the agreement of Mar. 6, 1890, vol. 21, p. 159.) 12,540 acres allotted to 83 Indians, remainder of reservation restored to public domain, act of June 7, 1897, vol. 30, p. 62. (Letter book 403, p. 115.) Joint resolution of June 19, 1902, vol. 32, p. 744.
Total.....	336, 360	
WASHINGTON.		
Chehalis..... (Under Cushman School.) Tribes: Chinook (Tsinuk), Clatsop, and Chehalis.		Order of the Secretary of the Interior, July 8, 1864; Executive order, Oct. 1, 1886. 471 acres set aside for school purposes. The residue, 3,753.63 acres, restored to the public domain for Indian homestead entry. 36 Indians made homestead selections, covering all the land. (See letter book 152, p. 201, and 153, p. 45.)
Columbia..... (Under Colville School.) Tribe: Columbia (Moses Band).		Executive orders, Apr. 19, 1879, Mar. 6, 1880, and Feb. 23, 1883. (See Indian appropriation act of July 4, 1884, vol. 23, p. 79.) Agreement made July 7, 1883, ratified by act of July 4, 1884, vol. 23, p. 79. Executive order May 1, 1886; Executive order of Mar. 9, 1894; department orders of Apr. 11, 1894, and Apr. 20, 1894, and Executive order of Jan. 19, 1906. 26,218 acres allotted to 35 Indians (see Executive order of May 21, 1886, and act of Mar. 5, 1906, 34 Stats., 55).
Colville..... (Under Colville Agency.) Tribes: Coeur d'Alene, Colville, Kalispel, Okinagan, Lake Methow, Nespelem, Pend d'Oreille, Sanpoff, and Spokane.	1 1, 009, 100	Executive orders, Apr. 9 and July 2, 1872; agreement made July 7, 1883, ratified by act of July 4, 1884, vol. 23, p. 79. Act of July 1, 1882, vol. 27, p. 62. (See acts of Feb. 20, 1896, vol. 29, p. 9, and July 1, 1898, vol. 30, p. 593.) 51,653 acres in north half allotted to 660 Indians (see letter book 428, p. 100); remainder of north half, estimated at 1,449,268 acres, opened to settlement Oct. 10, 1900 (see proclamation of the President, dated Apr. 10, 1900, 31 Stats., p. 1963). 240 acres have been reserved for town sites. 2,750.82 acres temporarily withdrawn for town sites. 333,275 acres allotted to 2,921 Indians. The residue, 1,009,100 acres (estimated), unallotted. Act of Feb. 7, 1903, vol. 32, p. 803. Allotments made under act of Mar. 22, 1906 (34 Stat. L., 80), and act of June 25, 1910 (36 Stat., 863). President's proclamation, opening reservation dated May 3, 1916 (39 Stat., p. 58 of proclamations), act Aug. 31, 1916 (39 Stat., 672).
Hoh River..... (Under Neah Bay School.) Tribe: Hoh.	640	Executive order, Sept. 11, 1893.
Kalispel..... (Under Coeur d'Alene Agency, Idaho.)	4, 629	Executive order, Mar. 23, 1914.
Klikitat..... (Nonreservation; Warm Springs, Oreg.)		6 townships in Gilliam County, Wash., set aside for allotment selection by about 200 Indians under sec. 4, act Feb. 8, 1887 (24 Stat., 358), as amended. (See 80088-1912.)
Lummi..... (Under Tulalip School.) Tribes: D'wamish, Etak-mur, Lummi, Snohomish, Sukwamish, and Swi'wamish.)		Treaty of Point Elliott, Jan. 22, 1855, vol. 12, p. 927; Executive order, Nov. 22, 1873. Allotted 12,560.94 acres to 109 Indians; school conducted on 2-acre tract purchased from John Martin.
Makah..... (Under Neah Bay School.) Tribes: Makah and Quileute.	1 19, 312	Treaty of Neah Bay, Jan. 31, 1855, vol. 12, p. 939; Executive orders, Oct. 26, 1872, Jan. 2 and Oct. 31, 1873. 3,727 acres allotted to 373 Indians. (See letter book 960, 228 and 37679, 1907.)

¹ Partly surveyed.

² Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
WASHINGTON—continued.		
	<i>Acres.</i>	
Muckleshoot (Under Cushman School.) Tribe: Muckleshoot.		Executive orders, Jan. 20, 1857, and Apr. 9, 1874. 44 Indians have been allotted 3,532.72 acres.
Nisqualli (Under Cushman School.) Tribes: Muckleshoot, Nisqualli, Puyallup, Skwawksnamish, Stallakoom, and 5 others.		Treaty of Medicine Creek, Dec. 26, 1854, vol. 10, p. 1132; Executive order, Jan. 20, 1857. Land all allotted. 4,718 acres to 30 Indians.
Ozette (Under Neah Bay School.) Tribe: Ozette.	640	Executive order, Apr. 2, 1893.
Port Madison (Under Tulalip School.) Tribes: Dwamish, Etakmur, Lummi, Snohomish, Sukwamish, and Swiwamish.	1 65	Treaty of Point Elliott, Jan. 22, 1855, vol. 12, p. 927; order of the Secretary of the Interior, Oct. 21, 1864. 7,219 acres allotted to 51 Indians; the residue, 65 acres, unallotted.
Puyallup (Under Cushman School.) Tribes: Muckleshoot, Nisqualli, Puyallup, Skwawksnamish, Stallakoom, and 5 others.		Treaty of Medicine Creek, Dec. 26, 1854, vol. 10, p. 1132; Executive orders, Jan. 20, 1857, and Sept. 6, 1873. 17,463 acres allotted to 167 Indians. Agreement made Nov. 21, 1876, ratified by act of Feb. 20, 1893, vol. 27, p. 404. (For text see annual report 1893, p. 518.) The residue, 599 acres laid out as an addition to the city of Tacoma, has been sold, with the exception of 39.79 acres reserved for school, and 19.43 acres for church and cemetery purposes, under acts of Mar. 3, 1893 (27 Stat., 633; June 7, 1897, 30 Stats., 62), and act of June 21, 1906 (34 Stats., 377).
Quileute (Under Neah Bay School.) Tribe: Quileute.	1 837	Executive order, Feb. 19, 1889.
Quinalt (Under Cushman School.) Tribes: Quinito and Quinalt.	1 168,553	Treaties of Olympia, July 1, 1855, and Jan. 25, 1856, vol. 12, p. 971; Executive order, Nov. 4, 1873. Under acts of Feb. 8, 1887 (24 Stats., 388), and Feb. 28, 1891 (26 Stats., 794). 690 Indians have been allotted 54,989.80 acres and 456.56 have been reserved for agency, lighthouse, and other purposes, leaving unallotted and unreserved 168,553 acres. Act Mar. 4, 1911 (36 Stat., 1545).
Shoalwater (Under Cushman School.) Tribes: Shoalwater and Chehalis.	1 335	Executive order, Sept. 22, 1866, 55,535-7-1909.
Skokomish (Under Cushman School.) Tribes: Clallam, Skokomish, and Twana.		Treaty of Point No Point, Jan. 26, 1855, vol. 12, p. 833; Executive order, Feb. 25, 1874. Allotted in treaty reserve 4,990 acres; residue, none. (See L. B., 895, p. 268.) Allotted in Executive order addition, known as the Fisher addition, 814 acres; residue, none. (L. B., 895, p. 285.) 62 allotments.
Snohomish or Tulalip (Under Tulalip School.) Tribes: Dwamish, Etakmur, Lummi, Snohomish, Sukwamish, and Swiwamish.	1 324	Treaty of Point Elliott, Jan. 22, 1855, vol. 12, p. 927; Executive order, Dec. 23, 1873. 22,166 acres allotted to 164 Indians.
Spokane (Under Spokane Agency.) Tribe: Spokane.	82,327	Executive order, Jan. 18, 1881. Agreement made Mar. 18, 1887, ratified by Indian appropriation act approved July 13, 1892, vol. 27, p. 139. (For text see Ann. Rept., 1892, p. 743.) Joint resolution of Congress of June 19, 1902, vol. 32, p. 744. Under act of May 29, 1908 (35 Stat. L., 458), approximately 628 Indians have been allotted 65,114 acres, and 1,247.30 acres set aside for church, school, agency, and town-site purposes. By proclamation of May 22, 1900, the President opened the surplus lands to settlement. 5,781 acres classified as agricultural land, 82,647.50 acres classified as timber reserved for tribal use.
Squaxon Island (Klahchemin) (Under Cushman School.) Tribes: Nisqualli, Puyallup, Skwawksnamish, Stallakoom, and 5 others.		Treaty of Medicine Creek, Dec. 26, 1854, vol. 10, p. 1132; land all allotted, 1,494.15 acres, to 23 Indians.
Swinomish (Perry's Island) (Under Tulalip School.) Tribes: Dwamish, Etakmur, Lummi, Snohomish, Sukwamish, and Swiwamish.		Treaty of Point Elliott, Jan. 22, 1855, vol. 12, p. 927; Executive order, Sept. 9, 1873. Allotted, 7,359 acres to 71 Indians; reserved for school, 89.80 acres.

1 Surveyed.

* Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
WASHINGTON—continued.		
Yakima	<i>Acres.</i> 1 412,404	Treaty of Walla Walla, June 9, 1855, vol. 12, p. 951. Agreement made Jan. 13, 1885, ratified by Indian appropriation act approved Mar. 3, 1893, vol. 27, p. 631. (For text see Misc. Indian Docs., vol. 41, p. 227; see also Ann. Rept., 1883, pp. 520-521, and S. Ex. Docs. No. 21, 49th Cong., 1st sess., and No. 45, 50th Cong., 1st sess.) Executive order, Nov. 28, 1892. Agreement, Jan. 8, 1894, ratified by act of Aug. 15, 1894, vol. 28, p. 320. 296,407 acres allotted to 3,137 Indians, and 1,020.24 acres reserved for agency, church, and school purposes. (See letter books 354, p. 419; 416, p. 263, and 879, p. 243.) Act of Dec. 21, 1904 (33 Stats., 895), recognizing claim of Indians to 233,837 acres additional land, subject to the right of bona fide settlers or purchasers, acquired prior to Mar. 5, 1904. (See 39848, 1909.) Act Mar. 6, 1906 (34 Stat., 53), and act May 8, 1910 (36 Stat., 348), under which 158,102 acres were allotted to 1,369 children. (See 9262-14.)
Total	1,609,166	
WISCONSIN.		
Lac Court Oreille	* 540	Treaty of Sept. 30, 1854, vol. 10, p. 1109; lands withdrawn by General Land Office, Nov. 22, 1860, Apr. 4, 1865. (See report by Secretary of the Interior, Mar. 1, 1873.) Act of May 29, 1872, vol. 17, p. 190. 68,511 acres all tited to 872 Indians. Act of Feb. 3, 1903, vol. 32, p. 795. (See 96927-1915.)
Lac du Flambeau	24,424	Treaty of Sept. 30, 1854, vol. 10, p. 1109, lands selected by Indians. (See report of Supt. Thompson, Nov. 14, 1863, and report to Secretary of the Interior, June 22, 1866. Department order of June 26, 1866. Act of May 29, 1872, vol. 17, p. 190. 45,756 acres allotted to 600 Indians; act of Feb. 3, 1903 (32 Stats., 795), leaving unallotted 24,424 acres.
La Pointe (Bad River)	13,930	Treaty of Sept. 30, 1854, vol. 10, p. 1109. 368.91 acres patented under art. 10; 195.71 acres fishing ground. 115,068 acres allotted to 1,610 Indians. (See letter to General Land Office, Sept. 17, 1896, and letter book 381, p. 49.) Acts of Feb. 11, 1901 (31 Stats., 766), Mar. 2, 1907 (34 Stats., 1217), and Aug. 1, 1914 (38 Stats., 582-605), leaving unallotted and unreserved school and swamp lands, 13,930 acres.
Potawatomi		Act June 30, 1913 (38 Stats., 77-102), which authorized the purchase of land in Wisconsin and Michigan for \$150,000.
Red Cliff		Treaty of Sept. 30, 1854, vol. 10, p. 1109; Executive order, Feb. 21, 1855. (See Indian Office letters of Sept. 3, 1856, and May 25, 1863, and General Land Office letter of May 27, 1863. See Executive orders. See report of Supt. Thompson, May 7, 1863. Lands withdrawn by General Land Office May 8 and June 3, 1863.) 2,535.91 acres allotted to 35 Indians under treaty; of the residue 11,504.90 acres were allotted to 160 Indians under joint resolution of Feb. 20, 1885, vol. 28, p. 970, and 40.10 acres were reserved for school purposes.
Menominee	* 231,680	Treaties of Oct. 18, 1848, vol. 9, p. 952; of May 12, 1854, vol. 10, p. 1064, Feb. 11, 1856, vol. 11, p. 679, and May 18, 1916 (39 Stats., 123-153).
Oneida	151	Treaty of Feb. 3, 1838, vol. 7, p. 566. 65,428.13 acres allotted to 1,502 Indians; remainder, 64.08 acres, reserved for school purposes. 6 double allotments canceled containing 151 acres (see 5013-1912). Trust period on 35 allotments extended 19 years; Executive order, May 24, 1918.
Stockbridge		Treaties of Nov. 24, 1848, vol. 9, p. 136; Feb. 5, 1856, vol. 11, p. 663, and of Feb. 11, 1856, vol. 11, p. 679; act of Feb. 6, 1871, vol. 16, p. 404. (For area, see act of June 22, 1874, vol. 18, p. 174.) 167 Indians allotted 8,920 acres. Patents in fee, act June 21, 1906 (34 Stats., 382). Act of Mar. 3, 1893 (27 Stat., 744).
Total	270,725	

* Partly surveyed.

* Surveyed.

* Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation to June 30, 1919—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
WYOMING.		
Wind River..... (Under Shoshone School.) Tribes: Northern Arapaho and Eastern Band of Shoshoni.	Acres. 1 584,940	Treaty of July 3, 1868, vol. 15, p. 673; acts of June 22, 1874, vol. 18, p. 166, and Dec. 15, 1874, vol. 18, p. 201; Executive order May 21, 1887. Agreement made Apr. 21, 1896, amended and accepted by act of June 7, 1896 (vol. 30, p. 93); amendment accepted by Indians July 10, 1897. (See Land Div. letter book 359, p. 468.) Act of Mar. 3, 1905, ratifying and amending agreement with Indians of Apr. 21, 1904. (See vol. 33, p. 1016.) President's proclamation June 2, 1906, opening ceded part to settlement. It contained 1,472,844.15 acres. (See letter book 866, p. 157.) Reserved for Mall Camp, 120 acres; reserved for Mall Camp Park, 40 acres; reserved for bridge purposes, 40 acres. Subject to disposition under President's proclamation, 1,438,633.66 acres. 246,522 acres were allotted to 2,401 Indians, and 1,792.06 acres were reserved for agency, school, church, and cemetery purposes, under acts of Feb. 8, 1887 (24 Stats., 388), as amended by act of Feb. 28, 1891 (26 Stats., 794), and treaty of July 3, 1868 (15 Stats., 673), leaving unallotted and unreserved 694,940 acres. Act of Aug. 21, 1914 (39 Stat., 511), mining, oil, and gas lands.
	1,270,199	Ceded.
Total.....	1,855,139	
Grand total.....	35,769,060	

1 Partly surveyed.

TABLE 7.—Lands set apart during fiscal year ended June 30, 1919, for temporary use and occupancy by mission organizations.

States and reservations.	Organization.	Act and citation.	Warrant for action.	Acres.
Total.....				111.64
Arizona: Navajo— Chin Lee.....	Board of Home Missions of the Presbyterian Church in the United States of America.		Policy...	30.00
Montana:				
Fort Belknap.....	St. Paul's Catholic Mission.....		...do.....	2.50
Fort Peck.....	Board of Home Missions of the Presbyterian Church in the United States of America.	May 30, 1908 (35 Stat., 558).	...do.....	21.14
Tongue River.....	Bureau of Catholic Indian Missions.....		...do.....	54.00
North Dakota: Standing Rock.	Domestic and Foreign Missionary Society of the Protestant Episcopal Church in the United States of America.	Feb. 14, 1913 (37 Stat., 675-676).	...do.....	40.00

TABLE 8.—*Patents in fee issued to mission organizations during fiscal year ended June 30, 1919.*

States and reservations.	Organization.	Act.	Citation.	Acce- age.
Total.....				644.94
North Dakota: Fort Totten.	Bureau of Catholic Indian Missions...	Mar. 3, 1909..	35 Stat., 814..	153.85
	do.....			80.00
	Board of Home Missions of the Presby- terian Church in the United States of America.	Mar. 3, 1902...	35 Stat., 814..	325.00
Oregon: Warm Springs.	Women's General Missionary Society of the United Presbyterian Church of North America.	.....do.....	.....do.....	6.09
South Dakota: Pine Ridge.	Domestic and Foreign Missionary Society of the Protestant Episcopal Church in the United States of America.	.....do.....	.....do.....	80.00

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1919.*

States and superintendencies.	Industry.	Number engaged.	Value of products.
Total, 1919.....		26,636	\$1,642,135
1918.....		25,433	1,030,369
1917.....		26,667	1,315,112
1916.....		26,966	1,206,826
1915.....		27,927	1,177,600
1914.....		22,968	1,194,185
1913.....		24,490	1,316,298
1912.....		22,564	1,211,335
1911.....		21,235	847,456
1900.....			177,169
1890.....			131,374
Arizona.....		8,732	447,863
Camp Verde.....	Basket making.....	45	675
	Woodcutting.....	6	210
Total.....		51	885
Colorado River.....	Basket making.....	20	600
	Beadwork.....	75	1,500
	Woodcutting.....	120	18,000
Total.....		215	20,000
Havasupai.....	Basket making.....	39	525
Kaibab.....	do.....	20	150
Leupp.....	Blanket weaving.....	365	20,000
	Others.....	100	4,500
Total.....		465	24,500
Moqui.....	Basket making.....	75	2,000
	Blanket weaving.....	250	26,000
	Pottery.....	25	1,200
	Woodcutting.....	135	1,185
	Others.....	2,130	59,615
Total.....		2,515	90,000
Navajo.....	Blanket weaving.....	600	135,000
	Others.....	85	8,800
Total.....		685	143,800

¹ Estimated.

TABLE 9.—Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1919—Continued.

States and superintendencies.	Industry.	Number engaged.	Value of products.
Arizona—Continued.			
Pima.....	Basket making ¹	1,050	\$10,500
	Pottery ¹	200	350
	Woodcutting.....	350	.....
Total.....		1,600	10,850
Salt River.....	Basket making.....	54	975
	Pottery.....	5	48
	Woodcutting.....	123	7,380
Total.....		182	8,403
San Carlos.....	Basket making.....	200	800
	Beadwork.....	50	150
	Woodcutting.....	200	14,000
Total.....		450	14,950
Sells ²	Basket making.....	750	15,000
	Woodcutting.....	400	45,000
	Others.....	50	1,500
Total.....		1,200	61,500
Truxton Canon.....	Basket making.....	30	300
	Woodcutting.....	30	3,000
	Others.....	100	5,000
Total.....		160	8,300
Western Navajo.....	Basket making.....	75	500
	Blanket weaving.....	900	60,000
	Woodcutting.....	50	2,000
	Others.....	125	1,500
Total.....		1,150	64,000
California.....		1,623	147,318
Bishop.....	Basket making.....	25	175
	Woodcutting.....	30	3,000
Total.....		55	3,175
Digger.....	Basket making.....	4	100
Fort Bidwell.....	do.....	100	2,000
	Beadwork.....	50	1,250
	Woodcutting.....	150	10,000
	Others.....	50	1,700
Total.....		350	14,950
Fort Yuma.....	Beadwork.....	20	1,200
	Pottery.....	6	1,000
	Woodcutting.....	25	500
Total.....		51	2,700
Greenville.....	Basket making.....	30	1,000
	Fishing.....	100	3,000
	Woodcutting.....	100	5,000
	Others.....	500	100,000
Total.....		730	109,000
Hoop Valley.....	Basket making.....	75	1,000
	Fishing.....	100	500
	Woodcutting.....	20	1,600
	Others.....	10	5,000
Total.....		205	8,100
Malki.....	Woodcutting.....	10	1,000

¹ 1918 report.² Formerly San Xavier.

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Industry.	Number engaged.	Value of products.
California—Continued.			
Pala.....	Basket making.....	46	\$700
	Lace making.....	32	463
	Pottery.....	2	15
	Woodcutting.....	15	1,496
Total.....		95	2,673
Soboba.....	Basket making.....	32	1,186
	Beadwork.....	1	22
	Lace making.....	20	1,475
	Woodcutting.....	24	1,665
	Others.....	2	60
Total.....		79	4,708
Tule River.....	Basket making.....	24	192
	Woodcutting.....	20	720
Total.....		44	912
Colorado: Southern Ute.....	Beadwork.....	30	500
Idaho.....		257	33,050
Coeur d'Alene.....	Beadwork.....	8	200
	Woodcutting.....	25	10,000
	Others.....	7	7,100
Total.....		40	17,300
Fort Hall.....	Basket making ¹	20	200
	Beadwork ¹	45	600
	Others.....	150	14,700
Total.....		215	15,500
Fort Lapwal.....	Woodcutting.....	2	250
Iowa.....		70	1,850
Sac and Fox.....	Beadwork.....	25	250
	Others.....	45	1,600
Kansas: Potawatomi.....	do.....	2	3,000
Michigan.....		290	35,870
Mackinac.....	Basket making.....	10	70
	Fishing.....	75	20,000
	Woodcutting.....	5	800
	Others.....	200	15,000
Minnesota.....		2,479	125,891
Grand Portage.....	Basket making.....	5	75
	Fishing.....	21	10,000
	Others.....	38	4,140
Total.....		64	14,215
Leech Lake.....	Beadwork.....	100	2,000
	Fishing.....	400	7,000
	Lace making.....	25	420
	Woodcutting.....	50	5,000
	Others.....	² 600	27,500
Total.....		1,175	41,920
Nett Lake.....	Others.....	112	3,850
Red Lake.....	Beadwork.....	120	1,000
	Fishing.....	130	10,872
	Woodcutting.....	75	7,875
	Others.....	8	299
Total.....		333	20,046

¹ Estimated.² Overestimated last year.

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1919—Continued.*

States and superintendences.	Industry.	Number engaged.	Value of products.
Minnesota—Continued.			
White Earth.....	Basket making.....	50	\$100
	Beadwork.....	100	3,000
	Lace making.....	10	200
	Fishing.....	400	5,000
	Woodcutting.....	200	10,000
	Others.....	35	27,560
Total.....		795	45,860
Montana.....			
		603	47,450
Blackfeet.....	Woodcutting.....	30	9,000
Crow.....	Others.....	4	3,000
Flathead.....	Beadwork.....	50	3,000
	Woodcutting.....	20	7,000
	Others.....	4	4,000
Total.....		74	14,000
Fort Belknap.....	Woodcutting.....	15	350
	Others.....	150	3,160
Total.....		165	3,510
Fort Peck.....	Beadwork.....	25	2,500
	Woodcutting ¹	30	1,500
	Others.....	60	10,000
Total.....		115	14,000
Rocky Boy's Agency.....	Beadwork.....	52	960
	Woodcutting.....	17	1,340
	Others.....	16	450
Total.....		85	2,750
Tongue River.....	Beadwork ¹	95	390
	Woodcutting.....	35	800
Total.....		130	1,190
Nebraska.....			
		15	19,380
Omaha.....	Others.....	10	¹ 15,580
Winnebago.....	do.....	5	¹ 3,800
Nevada.....			
		404	8,450
Fort McDermitt.....	Woodcutting.....	10	1,125
	Others.....	20	175
Total.....		30	1,300
Moapa River.....	Basket making.....	15	200
	Woodcutting.....	3	85
	Others.....	20	100
Total.....		38	385
Nevada.....	Basket making.....	30	400
	Beadwork.....	30	250
	Fishing.....	50	2,500
Total.....		110	3,150
Walker River.....	Basket making.....	100	1,110
	Beadwork.....	50	105
	Fishing.....	50	1,000
	Woodcutting.....	6	500
Total.....		206	3,315
Western Shoshone.....	Basket making.....	20	800

¹ Estimated.

TABLE 9.—Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1919—Continued.

States and superintendencies.	Industry	Number engaged.	Value of products.
New Mexico		5,264	\$337,180
Jicarilla.....	Basket making ¹	35	500
	Beadwork.....	30	200
	Woodcutting.....	4	300
	Others.....	19	1,850
Total		88	2,850
Mescalero.....	Basket making.....	40	1,000
	Beadwork.....	30	500
	Woodcutting.....	40	150
	Others.....	15	150
Total		125	1,800
Pueblo Bonito.....	Blanket weaving ¹	300	180,000
	Woodcutting.....	60	1,000
	Others.....	340	19,400
Total		1,200	200,400
Pueblo Day Schools.....	Basket making.....	4	125
	Beadwork.....	60	600
	Blanket weaving.....	1	505
	Pottery.....	820	8,680
	Woodcutting.....	22	1,740
	Others.....	84	6,785
Total		991	17,980
San Juan.....	Blanket weaving.....	2,000	100,000
	Others.....	800	5,000
Total		2,800	105,000
Zuni.....	Beadwork.....	50	300
	Blanket weaving.....	10	100
	Pottery.....	150	750
	Woodcutting.....	50	8,000
Total		260	9,150
North Dakota		410	2,800
Standing Rock.....	Beadwork.....	50	200
	Woodcutting.....	10	100
	Others.....	50	2,500
Total		110	2,800
Turtle Mountain.....	Woodcutting.....	300	(²)
Oklahoma		462	22,435
Cantonment.....	Beadwork.....	200	(²)
Kiowa.....	Woodcutting ¹	30	3,500
	Others.....	5	2,160
Total		35	6,660
Otoe.....	Others.....	72	10,000
Pawnee.....	do.....	1	(²)
Sage.....	Beadwork.....	154	5,775
Oregon		548	39,155
Klamath.....	Basket making.....	175	4,375
	Wood cutting.....	60	22,550
Total		235	26,925
Siletz.....	Basket making.....	10	180
	Woodcutting.....	8	600
	Others.....	20	1,600
Total		38	2,380

¹ Estimated.

² No record.

³ Unknown.

TABLE 9.—Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1919—Continued.

States and superintendencies.	Industry.	Number engaged.	Value of products.
Oregon—Continued.			
Umatilla.....	Beadwork.....	75	\$1,750
	Woodcutting.....	25	2,400
Total.....		100	4,150
Warm Springs.....	Beadwork.....	50	500
	Woodcutting.....	50	4,200
	Others.....	75	1,000
Total.....		175	5,700
South Dakota.....		972	60,446
Cheyenne River.....	Beadwork.....	20	100
Crow Creek.....	do.....	60	300
Flandreau.....	do.....	6	1 100
	Others.....	5	1 900
Total.....		11	1,000
Lower Brule.....	Beadwork.....	35	100
	Woodcutting.....	3	210
Total.....		38	310
Pine Ridge.....	Beadwork.....	297	4,376
	Woodcutting.....	409	8,860
	Others.....	137	45,500
Total.....		843	58,730
Utah.....		68	1,450
Shivwits.....	Basket making.....	20	150
	Woodcutting.....	15	600
Total.....		35	750
Uintah and Ouray.....	Basket making.....	7	200
	Beadwork.....	26	500
Total.....		33	700
Washington.....		1,434	178,625
Colville.....	Basket making.....	50	400
	Beadwork.....	60	480
	Woodcutting.....	35	16,000
	Others.....	16	22,480
Total.....		161	39,360
Cushman.....	Basket making.....	55	832
	Fishing.....	23	1,230
	Woodcutting.....	5	400
	Others.....	23	21,000
Total.....		106	23,462
Neah Bay.....	Basket making.....	135	1 6,900
	Fishing.....	96	1 28,800
	Others.....	112	19,900
Total.....		343	55,600
Spokane.....	Woodcutting.....	25	2,400
Taholah.....	Basket making.....	74	2,450
	Fishing.....	95	20,900
	Woodcutting.....	33	1,356
	Others.....	22	600
Total.....		224	25,306
Tulalip.....	Basket making.....	20	160
	Fishing.....	57	20,230
	Woodcutting.....	18	3,107
	Others.....	10	1,500
Total.....		105	24,997

1 Estimated.

TABLE 9.—Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1919—Continued.

State and superintendencies.	Industry.	Number engaged.	Value of products.
Washington—Continued.			
Yakima.....	Basket making ¹	50	\$400
	Beadwork ¹	300	1,600
	Fishing.....	100	1,000
	Woodcutting.....	20	4,500
Total.....		470	7,500
Wisconsin.....		2,918	126,222
Grand Rapids.....	Basket making.....	60	2,400
	Beadwork.....	8	45
	Fishing.....	9	1,870
	Woodcutting.....	15	1,100
	Others.....	480	35,000
Total.....		572	40,415
Hayward.....	Beadwork.....	60	800
	Fishing.....	500	1,000
	Woodcutting.....	75	5,000
	Others.....	600	4,350
Total.....		1,235	11,150
Keshena.....	Woodcutting.....	25	4,272
	Others.....	100	2,500
Total.....		125	6,772
Lac du Flambeau.....	Basket making.....	150	2,000
	Beadwork.....	300	3,000
	Fishing.....	100	4,200
	Woodcutting.....	100	10,000
	Others.....	120	720
Total.....		770	19,920
La Pointe.....	Basket making.....	5	250
	Beadwork.....	9	350
	Fishing.....	1	2,250
	Woodcutting.....	7	6,000
	Others.....	12	16,800
Total.....		34	25,650
Oneida.....	Basket making ¹	50	(¹)
	Lace making.....	75	3,000
	Others.....	1	(¹)
Total.....		126	3,000
Red Cliff.....	Lace making.....	3	40
	Fishing.....	20	9,000
	Woodcutting.....	10	10,000
	Others.....	23	275
Total.....		56	19,315
Wyoming.....		55	3,200
Shoshone.....	Woodcutting.....	15	1,200
	Others.....	40	2,000

RECAPITULATION.

Total.....	Basket making.....	3,884	63,065
	Beadwork.....	2,806	40,453
	Blanket weaving.....	4,928	521,150
	Fishing.....	2,327	150,952
	Lace making.....	165	5,598
	Pottery.....	1,208	12,043
	Woodcutting.....	3,700	291,225
	Others.....	7,620	557,659
Grand total.....		26,636	1,642,135

¹ Estimated.

² No report.

TABLE 10.—*Incomes of Indians (by reservations), including tribal incomes, fiscal year ended June 30, 1919.*

States and superintendencies.	Population.	Total.	Crops raised by Indians.	Stock sold.	Native industries, weaving, basketry, etc.	Value of timber cut.	Wages earned.	Rations and miscellaneous issues.	From individual leases.	Proceeds sales of land.	Interest on trust fund.	Treaty and agreement labor and obligations.	Indian moneys, proceeds of labor and miscellaneous.
Total, 1919.	304,974	\$53,994,859	\$11,087,589	\$3,716,551	\$1,642,135	\$2,114,984	\$3,599,190	\$398,320	\$5,203,199	\$3,740,869	\$1,379,922	\$724,860	\$20,437,240
1918.	306,755	42,056,070	9,781,862	3,996,441	1,080,360	1,660,891	3,199,800	357,622	3,805,497	4,584,017	1,303,980	725,360	11,087,381
1917.	309,409	35,867,996	7,960,796	3,324,318	1,315,112	1,466,139	2,506,957	501,229	3,353,231	6,917,753	1,568,054	725,560	6,312,571
1916.	307,797	26,489,946	5,293,719	2,583,069	1,208,826	1,137,061	2,378,377	491,026	3,003,905	3,421,535	1,776,115	630,860	4,584,765
1915.	309,911	23,185,046	4,700,968	2,114,623	1,174,900	1,446,021	2,304,359	499,585	2,975,526	3,571,865	2,125,787	630,560	1,586,182
1914.	307,447	24,709,074	4,007,335	1,569,633	1,194,185	1,225,056	2,105,124	576,202	3,496,634	4,812,812	1,777,543	630,560	3,071,711
1913.	308,340	26,285,494	4,021,392	1,783,950	1,315,298	1,605,011	2,065,124	437,458	4,396,151	6,116,309	1,830,584	780,560	1,940,597
1912.	300,320	22,494,023	3,260,258	1,781,785	1,315,298	2,000,337	1,940,414	590,655	3,542,927	4,475,489	1,740,296	594,560	1,694,082
1911.	296,320	21,091,986	1,961,762	900,000	847,556	1,398,166	1,861,630	460,225	2,392,071	6,010,642	1,911,906	1,772,649	2,061,015
1900.	247,522	3,307,235	1,507,072	(1)	177,160	132,225	953,573	123,000	109,946	(1)	1,387,349	(1)	797,210
1890.	230,437	3,668,060	1,044,052	1,061,355	447,863	44,891	688,150	55,672	(1)	2,080	(1)	(1)	324,047
Arizona.	42,346	3,668,060	1,044,052	1,061,355	447,863	44,891	688,150	55,672	(1)	2,080	(1)	(1)	324,047
Camp Verde.	436	39,451	4,900	331	885		33,270	65					7,995
Colorado River.	1,141	174,859	64,265	275	20,000		78,045	2,129		2,030			122,624
Fort Apache.	2,466	247,840	62,400	12,676		8,887	39,615	1,638					1,681
Fort Mojave.		5,989					4,318						
Havasupai.	176	9,272	2,713	1,280	525		4,399	355					
Kalbar.	108	6,397	765	1,177	150		4,197	108					
Leupp.	1,441	76,005	10,900	20,800	24,500		19,553	252					
Moqui.	4,000	172,430	60,000	2,984	80,000	985	18,166	315					
Navajo.	11,280	1,152,352	153,260	809,000	143,800	500	39,458	400					
Phoenix.	27	7,037					27,037						5,914
Prescott.	6,260	302,352	242,516	19,000	10,850	2,400	22,649	3,937					
Salt River.	9,264	329,153	264,835	14,425	8,403	5,425	42,932	3,223					
San Carlos.	2,515	304,667	22,700	32,357	14,950	14,800	41,318	43,393					145,065
Sells.	4,445	613,736	139,198	138,000	61,500	6,800	267,368	870					
Truxton Canon.	4,427	55,594			8,200		4,387	1,639					40,798
Western Navajo.	6,330	150,986	25,000	19,070	64,000	5,000	37,558	358					
California.	13,215	1,340,165	555,838	72,182	147,318	3,667	511,664	7,086	10,426	23,205	1,126		1,683
Bishop.	1,518	46,592	35,260	2,151	3,175		4,615	361					
Campo.	226	32,067	16,530	2,100			7,075	392					
Daguerre.	239	33,023	17,170	1,170	100	600	31,870	793					
Fort Bidwell.	719	97,044	36,860	7,940	14,950	250	30,600	584	2,400				
Fort Yuma.	908	310,651	215,000	6,250	2,700		82,324	923	15	5,421			13
Greenville.	2,924	276,574	31,860		106,000		132,460	188	2,911				165

Hopps Valley.....	1,712	102,765	30,549	14,450	8,100	667	48,043	806	100				
Malki.....	628	77,201	30,785	3,175	1,000		41,635	606					
Pah.....	1,054	128,524	71,171	11,453	2,673		42,743	481					
Round Valley.....	1,842	76,775	33,020	9,150			2,681	559	11,000	17,784	1,126		1,475
Sherman Institute.....		26,275					26,275						
Soboba.....	890	113,404	44,703	8,975	4,708	2,150	52,452	416					
Tule River.....	445	20,260	4,820	5,865	912		8,981	632					
Colorado.....	821	222,437	33,680	66,512	500	4,200	9,755	27,200	5,240	13,084	37,437	16,658	8,191
Southern Ute.....	341	104,625	33,680	1,100	500	4,200	5,955	24,234	5,240	7,066	15,549	6,973	58
Ute Mountain.....	480	117,972	(*)	65,412			3,800	2,966		6,018	21,888	9,685	8,133
Florida: Seminole.....	573	11,200	5,900				5,300						
Idaho.....	4,066	1,402,945	563,560	136,728	33,050	62,311	47,118	11,911	486,794	2,631	2,862	8,000	67,988
Coeur d'Alene.....	818	499,967	200,260	38,141	17,300	26,062	21,154		185,470	2,631	2,742	3,000	217
Fort Hall.....	1,789	373,540	172,256	78,022	15,600		18,664	11,911	48,534			5,000	23,653
Fort Lapwai.....	1,469	539,438	191,056	20,565	280	33,249	7,300		232,790		110		44,118
Iowa: Sac and Fox.....	348	40,799	12,100	600	1,860	2,160	5,578				17,076		1,435
Kansas.....	1,441	784,108	602,691	14,850	3,000		17,707		138,655		7,061		144
Haskell Institute.....		10,007					10,007						
Kikapoo.....	660	420,234	352,250	14,850			7,700		44,745		689		
Potawatomi.....	781	353,867	250,441	(*)	3,000				93,910		6,372		144
Michigan.....	1,065	67,071			35,870	22,281	8,867				23		
Macinac.....							837				23		
Mount Pleasant.....	1,065	59,011	(*)		35,870	22,281	8,060						
Minnesota.....	12,447	3,317,886	539,570	26,754	125,891	624,738	173,310	16,421	3,667	205,286	298,284	4,000	299,915
Fond du Lac.....	1,074	97,018	37,960				3,800	5,557		17,184	25,842		6,685
Grand Portage.....	340	45,751	1,200		14,215	547	12,911	1,215		5,440	8,182		2,040
Leach Lake.....	1,738	265,723	109,725	1,738	41,920	16,062	45,962	1,782	180	27,808	41,836		10,428
Net Lake.....	590	57,918	3,175		3,850	10,728	12,401	589		9,440	14,195		3,540
Pipestone (Birch Cooley).....	407	15,677	6,340				8,390	485	462				
Red Lake.....	1,008	1,008,686	91,240	26,754	20,046	593,452	56,822	1,143		36,550	44,700		235,979
Vermilion Lake.....		9,024				2,056	6,968						
White Earth.....	6,791	630,029	289,940		45,860	1,893	26,036	5,649	3,025	108,864	163,529	4,000	41,243

* Sundry reservations of Arizona and New Mexico.

* Sundry reservations.

* Does not include \$33,186 which is duplicated in farming and grazing tables.

* Unknown.

TABLE 10.—*Incomes of Indians (by reservations), including tribal incomes, fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Population.	Total.	Crops raised by Indians.	Stock sold.	Native industries, weaving, basketry, etc.	Value of timber cut.	Wages earned.	Rations and miscellaneous issues.	From individual leases.	Proceeds of sales of land.	Interest on trust fund.	Treaty and agreement obligations.	Indian moneys, proceeds of labor and miscellaneous.
Montana.	12,138	\$3,900,568	\$743,456	\$741,426	\$47,450	\$297,077	\$338,522	\$62,153	\$739,451	\$333,191	\$21,046	\$75,634	\$591,162
Blackfoot.....	2,883	621,005	75,100	316,000	9,000	12,267	112,608	27,917	35,620	.....	.....	.....	31,516
Crow.....	1,707	1,020,020	192,708	170,531	3,000	3,000	21,787	.....	176,833	83,188	980	.....	360,078
Flathead.....	2,452	752,083	172,300	63,750	14,000	186,286	66,791	1,983	70,618	56,121	6,000	5,500	120,234
Fort Belknap.....	1,198	183,752	108,665	.....	3,510	.....	20,604	2,850	.....	.....	.....	.....	48,135
Fort Peck.....	2,031	865,460	75,500	70,050	14,000	.....	38,139	.....	456,380	193,882	14,060	.....	3,449
Rocky Boy's Agency.....	451	72,519	11,093	2,200	2,750	.....	45,411	6,778	.....	.....	.....	.....	4,287
Tongue River.....	1,416	385,728	108,000	118,895	1,190	8,219	33,180	22,645	.....	.....	.....	70,134	23,463
Nebraska.	2,448	1,000,937	406,720	16,225	19,380	.....	15,776	.....	525,741	.....	4,182	.....	12,913
Genoa.....	1,380	7,350	.....	.....	.....	.....	7,350	.....	.....	.....	.....	.....	.....
Omaha.....	1,380	614,553	269,750	16,225	15,580	.....	2,160	.....	300,000	.....	1,066	.....	9,772
Winnebago.....	1,068	379,034	136,970	.....	3,800	.....	6,266	.....	228,741	.....	3,116	.....	3,141
Nevada.	8,840	430,737	131,318	42,396	8,450	250	218,188	4,212	5,011	.....	.....	.....	20,912
Carson.....	405	19,381	.....	.....	.....	.....	19,381	.....	.....	.....	.....	.....	.....
Fallon.....	405	64,605	27,635	1,316	.....	.....	34,500	.....	.....	.....	.....	.....	1,134
Fort McDermitt.....	323	37,032	4,480	.....	1,300	.....	20,952	396	.....	.....	.....	.....	1,904
Mojave River.....	111	18,026	10,400	575	385	.....	5,988	178	.....	.....	.....	.....	310
Nevada.....	526	18,254	6,204	2,617	3,150	250	3,444	1,115	.....	.....	.....	.....	1,472
Walker River.....	800	81,427	55,400	5,290	3,315	.....	13,971	1,021	300	.....	.....	.....	2,240
Western Shoshone.....	675	61,403	26,907	32,608	300	.....	15,492	1,154	.....	.....	.....	.....	14,882
Reno, special agent.	18,000	100,598	(*)	.....	.....	.....	95,440	448	4,711	.....	.....	.....	.....
New Mexico.	20,581	1,911,733	667,998	312,308	337,180	115,175	250,039	21,221	8,026	.....	.....	100,000	99,786
Albuquerque.....	10,745	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marilla.....	603	260,320	13,570	8,940	2,850	110,303	10,745	13,327	8,026	.....	.....	.....	76,039
Manuelito.....	613	67,526	15,107	2,015	7,800	.....	16,458	6,051	.....	.....	.....	.....	28,747
Pueblo Bonito.....	2,275	273,313	1,400	.....	200,400	.....	8,963	520	.....	.....	.....	26,000	.....
Pueblo Day Schools.....	8,724	630,018	409,913	112,335	17,980	197	6,177	1,313	.....	.....	.....	.....	.....
Santa Juan.....	6,550	438,460	88,472	128,750	105,000	.....	51,258	.....	.....	.....	.....	65,000	.....
Santa Fe.....	11,572	111,572	.....	.....	.....	.....	11,572	.....	.....	.....	.....	.....	.....
Zuni.....	1,816	224,768	139,940	60,265	9,150	4,075	10,739	.....	.....	.....	.....	.....	.....

New York.	6,100	22,536	(1)	19,675	2,800	2,771	203	1,938	10,500	9,587
North Carolina: Cherokee.	2,399	171,762	82,400	19,675		2,771	65,836	35		
North Dakota.	8,891	1,007,170	586,403	94,927	2,800		85,128	29,774	70,040	30,365
Blanchard.	3,880						3,880			
Fort Berthold.	1,176	442,686	20,250	69,750			11,443	177,796	4,360	29,161
Fort Totten.	3,979	178,046	69,776	1,750			15,442	42,773	815	285
Standing Rock.	3,477	779,863	229,127	23,427	2,800		6,983	206,123	25,414	578
Sioux Mountain.	3,306	199,623	137,250		(1)		9,391	90,966	54,560	371
Wapeton.		5,940					5,940			
Oklahoma.	116,380	24,860,706	1,478,287	297,443	22,435		194,507	2,642,069	59,120	17,983,486
Antonment.	733	119,678	54,080	1,450	(1)		4,651	50,497		
Cheyenne and Arapaho.	1,205	161,186	61,680				7,789	91,087		955
Calicoe.		63,491					13,263	26,757	23,516	
Choctaw-Chickasaw Reservation.	500						500			
Kiowa.	4,374	1,165,196	204,850	6,660			24,320	206,041	110,810	3,515
Ogawa.	2,154	9,855,634	336,935	258,975			19,800	289,638	237,807	8,692,431
Osage.	529	186,732	85,800	144	10,000		17,960	75,289	88	3,892
Pawnee.	777	194,041	79,660				8,610	54,944	47,100	315
Ponca.	1,072	383,894	206,000	6,538			(8)	6,060	3,412	1,344
Sao and Fox.	678	156,839	92,664	6,538			(10)	121,500	18,341	2,779
Sage.	742	137,313	22,138	2,060	5,775		30,943	116,397	82	597
Shawnee.	1,725	268,824	230,300	28,275			8,160	4,081	1,500	774
Shawnee.	735	107,249	41,180				7,100	54,164		
Total.	14,874	12,802,547	1,478,287	297,442	22,435		106,876	1,518,008	405,996	8,696,422
Five Civilized Tribes.										
Cherokee Nation.	8,910	722	(1)				79,439	56,493		8,774,790
Chickasaw Nation.	41,834	31,575					79,990	724	29,821	†
Choctaw Nation.	10,966	733,787					5,916	598,097	37,319	122,771
Creek Nation.	2,277	340					1,264	1,791,271	111,870	368,063
Seminole Nation.	18,761	61,772					1,223	83,665	26,034	309,909
Seminole Nation.	3,127	13,003						1,831	10,599	631
Total, Five Civilized Tribes.	101,506	12,048,159					87,631	2,411,178	215,273	9,267,064
									10,580	9,267,064

'Included with Shawnee.'

Individual Indian money and special deposits.

1 Includes 3,000 Indians,
2 Unknown.
3 Included with Pawnee.

3. Unknown.

1 Includes 3,000 Indians,
2 Unknown.
3 Included with Pawnee.

TABLE 10.—*Incomes of Indians (by reservations), including tribal incomes, fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Population.	Total.	Crops raised by Indians.	Stock sold.	Native industries, weaving, basketry, etc.	Value of timber cut.	Wages earned.	Rations and miscellaneous issues.	From individual leases.	Proceeds sales of land.	Interest on trust fund.	Treaty and service obligations.	Indian moneys, proceeds of labor and miscellaneous.
Oregon.....	4,407	\$1,363,116	\$603,589	\$150,060	\$39,115	\$220,532	\$27,774	\$5,222	\$160,802	\$12,770	\$11,908		\$100,314
Klamath.....	1,154	568,830	57,938	100,150	28,925	319,282	22,010	4,212	29,104		3,713		96,086
Salmon.....	13,142	13,142					12,142						10
Umatilla.....	1,138	42,815	23,000	(¹)	2,380		8,682	383	2,650	11,580	1,132		2,040
Warm Springs.....	1,167	649,464	467,661	20,800	4,110		2,000		128,238	2,190	7,018		3,288
South Dakota.....	1,928	96,865	56,000	50,000	5,700	1,250	11,330	617	780				
Cheyenne River.....	22,491	3,578,864	1,282,515	406,965	60,448	34,107	285,672	141,068	688,540	165,402	157,704	\$321,860	85,097
Crow Creek.....	2,773	503,917	61,322	54,635	100		22,218	27,669	87,685	107,368	36,844	45,320	60,728
Flandreau.....	944	173,506	66,932	(¹)	300		14,460	9,438	61,177		3,791	16,480	928
Hoop.....	263	36,588	9,927		1,000		11,798	1,191			9	12,360	
Lower Brule.....	515	113,764	44,910	8,640	310	2,145	21,874	1,889	11,836	83	1,454	8,240	12,375
Pierre.....	2,928	2,928					2,928						
Pine Ridge.....	7,318	703,788		269,865	56,726	31,963	86,941	89,148	106,087	16,764	24,088	107,120	2,037
Rapid City.....	5,348	5,348					6,348						
Sisseton.....	2,866	796,691	204,560	72,625			100,787	39,501	181,161	41,168	69,560	82,400	4,044
Sioux Falls.....	2,804	385,553	257,000	(¹)	9,616		10,187	2,285	55,624		13,079	49,440	2,857
Yankton.....	3,079	796,347	637,854	(¹)			10,187				8,879		2,128
Utah.....	1,632	608,344	122,848	26,900	1,450	3,866	128,877	28,006	54,388	36,089	75,308	22,062	6,520
Goshute.....	387	139,154	11,000				108,880	244		4,963	18,103		1,014
Shoshone.....	125	17,100	2,070		750		6,267	760		1,583	5,700		
Uintah and Ouray.....	1,110	362,090	106,788	28,900	700	3,866	18,780	27,012	54,888	26,648	61,805	22,062	5,805
Washington.....	10,968	2,236,297	1,064,531	165,279	178,625	143,769	134,249	944	423,361	24,630	3,052	1,000	116,948
Calville.....	2,518	595,085	249,590	114,580	39,360	1,643	13,776	683	22,915	31,067			61,941
Cushman.....	2,148	105,266	8,800	22,462	9,457	9,457	55,600	108	1,488		3,052		35
Neah Bay.....	669	69,101	7,430	1,075	55,800	4,847	13,897	9					
Spokane.....	617	128,247	92,500	4,060	2,400	4,051	13,897	103	4,151	3,552		1,000	3,068
Taholah.....	783	39,498	8,156	25,306			5,094	89					4,900
Tulalip.....	1,321	346,455	113,051	43,237	24,997	127,543	28,563		6,078				4,900
Yakima.....	2,933	1,042,585	585,000		7,500	127,955	13,063	12	388,725				47,300

Wisconsin.....	9,605	1,980,667	367,851	10,827	126,222	623,114	325,758	1,893	12	89,464	429,556
Grand Rapids.....	1,223	102,912	46,600	.....	40,415	.....	15,735	113	.....	.....	.....
Hayward.....	1,296	102,456	49,700	2,150	11,150	4,863	32,726	367	.....	.....	.....
Keshena.....	1,293	1,167,371	96,772	3,297	6,772	431,766	174,303	.....	.....	86,314	437,146
Lac du Flambeau.....	1,754	45,075	11,953	.....	19,020	.....	14,808	602	12	.....	680
Leco.....	840	47,100	10,205	.....	.....	.....	2,645	.....	.....	4,150	.....
La Pointe.....	1,032	368,833	94,875	10,300	25,650	188,244	52,767	367	.....	.....	1,780
Oreton.....	2,630	58,890	45,500	()	3,000	.....	7,220	.....	.....	.....	.....
Red Cliff.....	627	112,235	26,545	1,080	19,315	3,241	63,550	544	.....	.....	.....
Tumath.....	.....	3,744	.....	.....	.....	.....	3,744	.....	.....	.....	.....
Wyoming: Shoshone.....	1,712	556,781	145,300	45,150	3,200	75	30,182	4,804	14,025	10,183	287,033
										393	36,460

1 Sundry reservations.

1 Not reported.

TABLE 11.—Use of agricultural lands belonging to Indians, fiscal year ended June 30, 1919.

States and reservations.	Area of lands.		Used for grazing purposes.		Cultivated by Indians.		Able-bodied male adults.	Number of Indians farming.	Leased.				Unallotted.			Total Income.	
	Allotted.	Unal- lotted.	Allotted.	Unal- lotted.	Allotted.	Unal- lotted.			Allotted.		Num- ber of leases.	In- come.	Num- ber of leases.	Area.	In- come.		
									Number of leases.	Number of allot- ments.							Area.	In- come.
Arizona.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.											
	71,915	220,401	4,467	43,617	54,018	49,982	9,574	11,199	303	552		5,520					
	12,355	87,806			1,325	140	95	25									
	3,150	108		8		3,150	508	410	302	302		3,020	(*)				
	108	108				100	59	57									
	750	750	20,000	250		500	26	19									
	4,000	4,000				4,000	257	100									
	22,167	22,167				22,167	1,050	900									
	60,000	60,000			145,610	1,940	1,050	2,000									
	8,040	2,075	2,467	3,576	5,573	1,350	1,470	1,500	1	250	2,500	(*)					
California.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.											
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
	6,311,991	2,533,328			265,080	117,945	28,544	10,835	(*)	12,592		2,528,485	(*)	1,708	153,293	2,075,271	1,063
Bishop.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.											
	32,862	23,948	21,800	13,980	12,374	8,600	3,976	1,813	711	821	7,928	11,115	2	440	90	11,205	
	3,350	635	1,550	400	1,300	235	517	236									
	115	25	50		45	45	89	34									
	6,150		4,750		1,400		186	84									

Fort Yuma.....	8,020	600	.....	2,500	40	315	200	572	572	5,720	*15	(*)	100	15	30
Green Valley.....	6,820	230	13,970	1,400	1,350	441	230	1	1	20	100	.....	.....	.....	.....
Hoopa Valley.....	1,400	1,330	.....	1,400	1,350	441	230	1	1	20	100	.....	.....	.....	.....
Malheur.....	13,730	10,940	.....	1,080	1,324	210	133	.....	.....	.....	.....	1	40	5	.....
Pala.....	1,619	3,380	524	1,570	1,324	210	133	.....	.....	.....	.....	.....	.....	.....	.....
Round Valley.....	5,388	3,714	956	1,464	3,294	509	60	138	248	2,188	11,000	1	300	70	11,070
Shoshone.....	3,714	661	.....	3,294	300	262	20	.....	.....	.....	.....	.....	.....	.....	.....
Tule River.....	3,268	.....	.....	306	123	20	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado.....	15,600	10	998	3,229	10	153	87	40	.....	4,073	4,842	.....	.....	.....	4,842
Southern Ute.....	15,600	10	998	3,229	10	91	86	.....	.....	4,073	4,842	.....	.....	.....	4,842
Ute Mountain.....	.....	.....	.....	.....	.....	63	1	.....	.....	.....	.....	.....	.....	.....	.....
Florida: Seminole.....	.....	2,140	.....	.....	800	*165	86	.....	.....	.....	.....	.....	.....	.....	.....
Idaho.....	210,662	11,079	28,683	2,562	24,195	50	832	591	2,100	2,228	157,211	438,920	23	792	4,024
Coeur d'Alene.....	86,434	2,000	9,060	1,850	9,200	50	230	101	288	228	37,808	185,030	.....	.....	185,030
Fort Hall.....	36,540	6,579	19,273	642	6,840	410	275	680	680	12,650	22,906	11	138	(*)	22,906
Fort Lapwai.....	115,688	2,500	350	.....	10 8,185	162	215	1,342	1,310	106,753	231,003	12	684	4,024	235,037
Iowa: Sac and Fox.....	.....	2,520	500	.....	1,500	122	60	.....	.....	.....	.....	2	530	3,830	3,830
Kansas.....	41,177	.....	1,750	.....	12,012	305	218	352	323	29,998	115,886	.....	.....	.....	115,886
Kikapoo.....	19,115	.....	1,750	.....	6,015	149	100	212	183	13,873	44,745	.....	.....	.....	44,745
Potawatomi.....	22,062	.....	.....	.....	* 5,997	166	118	140	140	16,065	71,141	.....	.....	.....	71,141
Michigan: Mackinac.....	670	.....	.....	.....	670	280	30	.....	.....	.....	.....	.....	.....	.....	.....
Minnesota.....	225,329	68,166	2,992	66,916	15,833	2,128	1,018	22	22	3,910	2,666	2	120	110	2,776
Fond du Lac.....	14,000	.....	1,000	.....	1,600	245	90	.....	.....	.....	.....	.....	.....	.....	.....
Grand Portage.....	30	.....	.....	.....	* 11	63	20	.....	.....	.....	.....	.....	.....	.....	.....
Leech Lake.....	6,210	.....	2,992	.....	3,051	474	365	.....	.....	.....	.....	.....	.....	.....	.....
Nett Lake.....	.....	.....	.....	.....	190	120	20	.....	.....	.....	.....	.....	.....	.....	.....
Pipestone (Birch Cooley).....	492	.....	.....	.....	332	23	7	9	9	167	425	.....	.....	.....	425
Red Lake.....	67,766	.....	65,916	.....	1,850	321	185	.....	.....	.....	.....	.....	.....	.....	.....
White Earth.....	204,600	400	(11)	10,640	.....	883	330	13	13	3,743	2,241	2	120	110	2,351

1 Includes some grazing leases also.
2 Not reported.
3 Included in "Total income."
4 Only items reported.
5 Acreage reported in 1918 values.
6 Acreage reported in 1918 report.
7 1918 report.
8 Improvements.
9 Families actually living upon and cultivating lands in severity.
10 Estimated.
11 As reported.
12 Unknown.

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^a Families actually living upon and cultivating lands in severalty.

^a Families actually living upon and cultivating lands in severity.

* Families actually living upon and cultivating lands in severalty.

*** Families actually living upon and cultivating lands in severity.**

TABLE 11.—Use of agricultural lands belonging to Indians, fiscal year ended June 30, 1919—Continued.

States and reservations.	Area of lands.		Used for grazing purposes.		Cultivated by Indians.		Able-bodied male adults.	Num-ber of Indians farm-ing.	Leased.							
	Unal-lotted.		Unal-lotted.		Unal-lotted.				Allotted.				Unallotted.		Total income.	
									Number of allot-ments.	Area.	In-come.	Num-ber of leases.	Area.	In-come.		
Montana.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.			1,603	1,724	304,308	\$357,351	11	26,600	\$90	\$357,431
Blackfeet.	117,000	78,000	70,000	30,000	5,880	1,511	110	20	210	10,500	6,500	1	180	80	6,580	
Crow.	183,307	28,440	15,000		20,000	410	240	704	317	112,439	145,833	10	26,440	(*)	145,833	
Flathead.	117,000	66,980	35,000	25,000	30,000	639	350	548	555	46,969	70,618				70,618	
Fort Belknap.		42,000		37,500		4,500	358									
Fort Peck.	283,000		48,680		9,975	485	165	330	330	134,400	134,400				134,400	
Rocky Boy's Agency.		6,120		4,931		1,189	105	76								
Tongue River.		35,400		26,280		6,300	273	260								
Nebraska.	114,144	3,000			21,296	800	617	498	1,468	92,848	525,741	43	3,676	5,014	530,755	
Omaha.	60,000	3,000			12,300	800	326	260	730	47,700	300,000	40	3,000	4,000	304,000	
Winnebago.	54,144				8,996		291	228	738	45,148	225,741	3	676	1,014	226,755	
Nevada.	17,803	22,654	10,635	20,860	4,098	1,476	3,689	677	3	60	300				300	
Fallon.	4,360	18			1,200		150	67								
Fort McDermitt.	1,330	580	642	175	688	56	35	92								
Moapa River.	600		260		350		38	38								
Nevada.	21,000		20,685		315		144	200								
Walker River.	9,783	36	8,443		1,410	36	254	105	3	60	300				300	
Western Shoshone.	1,070					1,070	163	75								
Reno, special agent.	1,750		1,300		*450		2,850	100								
New Mexico.	3,025	58,030	1,746	22,040	949	35,890	3,330	4,335								
Jicarilla.	2,725		1,746		599		181	87								
Mescalero.		9,210		7,390		1,820	144	122								
Pueblo Bonito.	300	100			350		(*)	175								
Pueblo Day Schools.		26,800		4,850		22,050	2,622	2,050								
San Juan.		13,830		7,800		6,020	(*)	1,000								
Zuni.		8,000		2,000		6,000	543									
New York: New York Agency.		88,847		30,000		20,000	(*)	1,000					(*)	8,500	(*)	

North Carolina: Cherokee.	15,000	9,000	6,000	549	380	1,821	2,370	177,127	273,933	1	40	100	273,933
North Dakota.	15,000	15,000	48,327	2,133	1,805	810	1,385	76,800	104,000				104,000
Port Berthold.	15,000	15,000		292	465	496	472	27,999	12,300				42,300
Port Totten.	15,000	15,000		253	150	197	316	37,215	83,741				83,741
Standing Rock.	15,000	15,000		673	550	316	310	36,310	42,932				42,932
Turtle Mountain.	15,000	15,000											
Okahoma.	20,840	15,856		3,539	2,647	8,083	7,187	1,027,965	1,261,502	135	26,840	100	1,261,502
Cantonment.	52,172			191	148	401	337	48,072	51,377				51,377
Cheyenne and													
Arapaho.	61,142			292	121	932	563	58,102	83,848				83,848
Five Civilized													
Tribes.	20,800			(*)	(*)	1,272	2,272	94,770	49,273	134	26,800	(*)	49,273
Kiowa.	800,000	3,450		961	1,200	2,923	2,000	435,748	580,000				580,000
Ojibwa.	186,000	11,600		543	163	418	416	138,000	183,000	1	40	100	183,200
Ojibwa.	39,276	2,768		122	64	266	248	26,862	51,794				51,794
Pawnee.	80,647	3,000		161	73	295	295	47,794	54,944				54,944
Ponca.	83,850	8,000		210	163	538	306	55,000	107,600				107,600
Sao and Fox.	35,101	867		142	60	204	204	20,882	38,817				38,817
Seger.	55,519	5,180		189	129	314	406	54,611	87,897				87,897
Seneca.	49,673	6,668		380	160	(*)	(*)	(*)	(*)				(*)
Shawnee.	67,442	40,865		397	366	730	730	73,074	73,322				73,322
Oregon.	138,081	79,386	46,060	818	483	494	597	46,664	139,264	1	40	75	139,889
Klamath.	30,000	21,625	35,000	257	123	736	740	76,665	78,141				78,141
Umatilla.	3,940	100		141	80	40	40	1,710	2,680				2,680
Warm Springs.	1,550	1,050	12,121	249	160	415	514	39,199	128,173	1	40	75	128,248
South Dakota.	1,200	323,228	336	4,550	4,132	2,897	1,965	178,066	210,764				210,764
Cheyenne River.	11,496			639	982	27	37	4,000	2,300				2,300
Crow Creek.	11,496			125	150	8	8	771	931				931
Flandreau.	1,200			78	20								
Lower Brule.	49,673			83	102								
Pine Ridge.	11,265			1,210	1,408	30	80	1,345	2,826				2,826
Rosebud.	1,305,266	275,000		1,220	996	428	428	49,220	49,220				49,220
Sisseton.	117,001	20,000		1,578	250	1,800	900	93,691	100,000				100,000
Yankton.	40,996	540		617	275	1,304	304	23,631	56,467				56,467

* Decrease caused by allotments sold.
 * Classified as grazing land.
 * Includes hay acreage.

* Includes grazing.
 * Leases are made without departmental supervision.
 * Includes some grazing leases.
 * Not all reported.

1918 report.
 * Not reported.
 * Estimated.
 * Unknown.

TABLE 11.—Use of agricultural lands belonging to Indians, fiscal year ended June 30, 1919—Continued.

States and reservations.	Area of lands.		Used for grazing purposes.		Cultivated by Indians.		Able-bodied male adults.	Num-ber of Indians farm-ing.	Leased.						
	Allotted.	Unal-lotted.	Allotted.	Unal-lotted.	Allotted.	Unal-lotted.			Allotted.			Unallotted.			Total income.
									Number of leases.	Area.	In-come.	Num-ber of leases.	Area.	In-come.	
Utah.....	Acres. 64,414	Acres. 1,445	Acres. 5,491	Acres. 1,075	Acres. 7,860	Acres. 370	407	405	1,342	50,943	932	54,163	\$54,163		
Goehutte.....	315	300			315	300	100	145							
Shirwits.....	1,145				70		27	90							
Utah and Ouray.....	64,099	1,000	5,491	1,000	7,545		280	170	1,342	50,943	932	54,163	54,163		
Washington.....	303,476	38,709	77,850	27,679	44,306	122	1,938	1,218	1,345	94,548	1,432	401,910	401,910		
Colville.....	109,550	26,459	37,890	26,459	29,162		615	611	300	20,620	384	22,915	22,915		
Cushman.....	5,280		3,728		192		150	81	9	300	9	1,485	1,485		
Neah Bay.....	3,420	250	250	220	250	30	197	17							
Spokane.....	35,967	10,000	1,000	1,000	2,147		121	75	34	3,330	39	4,000	4,000		
Tanah.....	1,040	2,600	340		101		142	20							
Tulalip.....	12,199	727	2,700		9,400		318	208	24	1,809	22	6,075	6,075		
Yakima.....	136,600		31,060				395	206	978	67,990	978	367,435	367,435		
Wisconsin.....	80,388	17,720	6,806	20,576	11,358	5,399	2,224	1,371	1	4	1	12	12		
Grand Rapids.....	12,774														
Hayward.....	51,800			9,000	1,836		275	250							
Keshena.....					2,100		370	105							
Lac du Flambeau.....	457	3,504			3,504		421	266							
Leona.....		50			457		184	85	1	4	1	12	12		
La Pointe.....	12,416			11,576			840	65							
Oneida.....	1,750		1,490		2,540		116	165							
Onondaga.....	5,000	1,750	5,235		1,805		714	400							
Red Cliff.....	19,802		180		375		154	35							
Wyoming: Shoshone.....	77,996	75,700	47,825	75,700	7,423		401	247	313	22,750	313	10,883	10,883		

1 As reported.

2 Decreases due to influenza and to the making of irrigated pastures.

3 Estimated.

4 Unknown.

5 Share of crop not included.

TABLE 12.—Use of grazing lands belonging to Indians, fiscal year ended June 30, 1919—Continued.

States and reservations.	Area of lands.		Agricultural and other lands and used for grazing purposes.		Grazed by Indian stock.		Indians engaged in stock raising.	Leased.					
								Allotted.			Unallotted.		
	Allotted.	Unallotted.	Allotted.	Unallotted.	Allotted.	Unallotted.		Number of leases.	Area.	Income.	Number of leases.	Area.	Income.
California.....	Acrea. 103,404	Acrea. 180,369	Acrea. 21,800	Acrea. 13,680	Acrea. 67,800	Acrea. 97,970	1,247	103	304	\$5,311	6	13,340	\$933
Bishop.....	5,820	(1)	1,650	400	\$7,070	\$18,589	\$451						
Campo.....	18,180	18,205	50		\$100	\$18,589	28						
Digger.....	50		50		\$100	\$18,589	28						
Fort Bidwell.....	43,000	2,000	4,750		12,960	2,000	(1)	14	180	32,000			
Fort Yuma.....	16,479	1,427	13,970		8,064	177	\$20	80	154	22,385			
Greenville.....	1,600	3,000			1,600	3,000	\$20	80					
Hopps Valley.....	95,082	95,082	10,949		\$94,749	\$94,749	126	80					
Malheur.....	153	8,485	524		\$677	\$10,025	47				1	40	5
Pala.....	38,062	17,927	966		\$37,845	17,141	144				1	300	70
Round Valley.....	33,994			661		21,994	102				4	12,000	563
Soboba.....							161						
Tule River.....							62						
Colorado.....	34,655	360,000	998		15,998	112,440	86	19		3,120	4	247,580	4,075
Southern Ute.....	34,655	360,000	998		15,998	112,440	86	19	(1)	3,120			398
Ute Mountain.....											4	247,560	4,075
Florida: Seminole.....	339,437	111,014	28,683	2,592	194,991	72,286	1,091	1,181	1,187	178,924	53	10,800	3,457
Idaho.....							\$80						
Coeur d'Alene.....	19,640	2,839	9,080	1,960	\$27,320	\$4,579	403	11	11	1,700			440
Fort Hall.....	305,040	96,840	19,273	642	153,461	63,680	322	1,153	1,153	170,852	28	3,492	1,305
Fort Lapwai.....	14,752	11,845	19,330		14,210	4,000	367	17	23	1,372	25	7,365	2,153
Iowa: Sac and Fox.....		370	500			\$870	75						

Kansas.....	20,238	1,750	4,686	170	160	160	18,853	22,769	.....	22,769
Kikapoo.....	2,966	1,750	2,213	131	160	160	18,853	22,769	.....	22,769
Potawatomi.....	23,252	.....	2,473	49	.....	.....	.....	.....	.....	.....
Michigan: Mackinac.....	(*)	(*)	(*)	45	.....	.....	.....	.....	.....	.....
Minnesota.....	189,806	3,992	65,916	941	49	49	3,248	1,001	23	1,897
Fond du Lac.....	9,000	1,000	1,000	100	.....	.....	.....	.....	.....	401
Grand Portage.....	6,000	.....	.....	8	.....	.....	.....	.....	.....	.....
Leech Lake.....	18,728	2,992	12,835	190	8	8	414	180	.....	180
Nett Lake.....	(*)	.....	(*)	20	.....	.....	.....	.....	.....	.....
Prestons (Birch Cooley).....	77	.....	30	8	4	4	17	37	.....	37
Red Lake.....	123,080	.....	65,916	193	.....	.....	.....	.....	.....	.....
White Earth.....	1,515,987	3,704,321	311,909	852,985	2,181	2,338	3,070	949,349	382,100	117
Montana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Blackfoot.....	628,760	70,000	108,600	540	220	910	291,200	28,120	105	750,000
Crow.....	410,807	1,750,124	63,577	336	2,045	2,087	352,231	31,000	8	1,595,107
Flathead.....	42,000	35,000	25,000	265	43	43	3,948	(*)	.....	200,000
Fort Belknap.....	.....	37,500	196,217	265	.....	.....	.....	.....	.....	37,572
Fort Peck.....	424,400	48,680	68,680	200	50	50	321,080	321,080	.....	321,080
Rocky Boy's Agen- cy.....	.....	46,380	.....	5	.....	.....	.....	.....	1	30,080
Tongue River.....	.....	26,280	355,960	470	.....	.....	.....	.....	1	90,000
Nebraska: Winnebago.....	5,000	.....	5,000	76	.....	.....	.....	.....	.....	.....
Nevada.....	88,920	693,384	16,065	1,144	22	445	69,828	4,711	1	499,010
Fallon.....	.....	800	.....	68	.....	.....	.....	.....	.....	17,980
Fort McDowell.....	420	442	175	10	.....	.....	.....	.....	.....	.....
Mojave River.....	250	250	250	140	.....	.....	.....	.....	.....	.....
Nevada.....	.....	.....	250	40	.....	.....	.....	.....	.....	.....
Walker River.....	301,000	20,685	120,000	35	.....	.....	.....	.....	.....	.....
Western Shoshone.....	71,824	8,443	71,824	71	.....	.....	.....	.....	.....	.....
Reno, Special Agent.....	320,010	320,010	320,010	190	.....	.....	.....	.....	.....	.....
Reno, Special Agent.....	88,250	1,300	6,300	600	22	445	69,828	4,711	12	330,010

* Included in agricultural, preceding table.

† Agricultural lands.

* Grazing permits.

† 1917 report.

* Hay leases.

† Hay permits.

1 Not reported; valueless.

* Includes some agricultural lands.

† 1918 report.

* Not reported.

TABLE 12.—Use of grazing lands belonging to Indians, fiscal year ended June 30, 1919—Continued.

States and reservations.	Area of lands.		Agricultural and other lands used for grazing purposes.		Grazed by Indian stock.		Indians engaged in stock raising.	Leased.						
								Allotted.		Unallotted.				
	Allotted.	Un- allotted.	Allotted.	Un- allotted.	Number of leases.	Number of allotments.		Area.	Income.	Num- ber of leases.	Area.	Income.	Total income.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.								
New Mexico.....	686,477	6,907,836	1,746	22,040	500,279	6,558,729	10,626	111	197,944	\$8,026	18	571,137	\$23,388	\$31,414
Albuquerque.....	248,477	356,647	1,746		52,279	130,760	153	111	197,944	8,026	18	226,887	4,908	12,932
Mesquite.....		380,000		7,380		102,140	158					286,250	15,982	15,982
Pueblo Bonito.....	445,000	1,500,000			416,000	1,000,000	3,400							
Pueblo Day Schools.....	489,179		4,880			494,029	2,015							
San Juan.....	3,752,000		7,800			3,756,800	3,800					50,000	2,500	2,500
Zuni.....	110,000		2,000			\$112,000	1,200							
North Carolina: Cherokee.....		48,000		9,000		\$57,000	450							
North Dakota.....	804,854	175,876	1,104,224	15,000	1,272,875	64,951	1,977	2,226	544,034	154,006	18	126,085	25,225	179,231
Fort Berthold.....	331,461	175,876	16,124	15,000	222,427	64,951	490	100	125,158	25,031	18	126,085	25,225	50,266
Fort Totten.....	14,968		26,760		\$46,819		200	15	850	428				428
Standing Rock.....	232,425		988,350		\$903,629		737	1,721	378,146	122,387				122,387
Turtle Mountain.....	165,000		60,000		100,000		550	380	39,880	6,163				6,163
Oklahoma.....	1,483,625	1,060	15,896		174,896		2,044	5,753	811,712	392,960	1	680	522	393,482
Cantonment.....	31,979				5,920		141	126	26,069	8,120				8,120
Cheyenne and Arapaho.....	91,586				19,797		62	982	71,789	7,839				7,839
Five Civilized Tribes.....	94,770						600	1,003	94,770	7,220				7,220
Klowa.....	141,901		2,430		\$6,711		1,124	1,000	136,620	80,000				80,000
Osage.....	869,512				80,000		1,176	1,075	320,000	146,508				146,508
Otoe.....	52,974	720	10,839		28,426		1,210	325	34,387	20,575	1	680	522	21,097
Paynee.....	31,289				3,012		156	396	26,276	\$54,944				54,944
Pawnee.....	25,000	320			3,000		142	200	22,000	14,000				14,000
Saco and Fox.....	75,223		587		\$5,283		80	203	26,068	26,500				26,500
Sage.....	26,059				7,089		175							

	81,261 23,021	235,769	519,711	1,000	27,862 116,856	375,042	1,061	267	283	273	27,800 18,641	25,269	13	187,719	2,625	25,269	25,269
Oregon.....																	
Klamath.....	132,719	23,000	111,121	21,625	35,000	115,099	378	267	283	273	27,800	25,269	13	187,719	2,625	25,269	25,269
Siletz.....	28,400	8,000	73,000	100	1,060	2,850	38	267	283	273	27,800	25,269	13	187,719	2,625	25,269	25,269
Umatilla.....	79,370	335,580	335,580	57,671	10,000	134,241	215	267	283	273	27,800	25,269	13	187,719	2,625	25,269	25,269
Warm Springs.....																	
South Dakota.....																	
Cheyenne River.....	4,797,522	919,546	328,328	335	2,867,383	342,931	5,353	8,410	9,202	9,202	1,798,500	427,776	29	566,980	24,885	427,776	427,776
Grow Creek.....	1,000,782	673,980			619,378	110,666	740	1,372	2,075	2,075	317,800	105,386	19	553,324	28,679	105,386	105,386
Grand Coulee.....	305,891				200,000		221	1,192	1,192	1,192	125,835	60,286				60,286	60,286
Lower Brule.....	141,880	38,000	47,788		335	38,000	385										
Pine Ridge.....	2,449,180	207,536			1,28,555	183,630	1,397	2,529	2,529	2,529	823,491	105,221	10	13,626	1,206	105,437	105,437
Rosebud.....	867,272		275,000		1,628,240		1,425	2,383	2,383	2,383	10,445,800	10,131,941	10	13,626	1,206	105,437	105,437
Siouxon.....	175,588	580			8,000	500	200	200	200	200	8,561	3,000				3,000	3,000
Yankton.....	39,599	540			2,340		400	10,468	10,468	10,468	10,20,600	10,20,157				30,137	30,137
Utah.....																	
Goshute.....	11,038	256,100	5,491	1,075	10,691	132,565	322	3	3	3	520	225	33	124,580	1,454	1,454	1,454
Shawits.....																	
Umatih and Ouray.....	11,038	217,080	5,491	1,000	10,691	93,500	295	3	3	3	520	225	33	124,580	1,454	1,454	1,454
Washington.....																	
Colville.....	217,603	898,622	37,890	26,459	197,880	680,659	77										
Cushman.....	2,922		3,723		5,589		52										
Neah Bay.....			3,170	220	3,170	210	52										
Spokane.....	14,000	22,000	1,000	1,000	6,000	3,000	75	12	12	12	1,413	151	13	20,000	2,080	2,080	2,080
Tulalip.....	2,640	24,500	340		6,000	1,000	34										
Yakima.....	12,404	24,500	727		7,022	124	124										
Yakima.....	285,910	584,833	31,000		122,100	100,000	1,067	274	274	274	18,400	21,300	20	429,854	42,985	64,265	64,265
Wyoming.....																	
Hayward.....	23,050	188,283	6,805	20,578	20,105	197,264	1,094										
Ketchikan.....	12,300			9,000	12,300	1,184,564	140										
Laramie.....				11,576		12,700	225										
Ogallala.....				5,135		5,135	490										
La Poudre.....	10,780	2,260		1,400	2,400		175										
Red Cliff.....				180			34										
Wyoming: Shoshone.....	109,279	1,464,837	47,825	75,700	147,574	76,700	330	110	110	110	9,580	3,142	152	1,464,837	74,287	74,287	74,287

1 1918 report.
2 Includes some agricultural leases.
3 Includes some agricultural leases.
4 Includes some agricultural leases.
5 Includes some agricultural leases.
6 Includes some agricultural leases.
7 Agricultural land.
8 Leased by Indians direct.
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TABLE 13.—*Employment of Indians during fiscal year ended June 30, 1919.*

States and superintendencies.	Total employed.		Indians employed by United States Indian Service.				Employed by private parties.			
			Regular employees.		Irregular employees.		Adults.		Miners or outing pupils.	
	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.
Total, 1919.....	46,228	\$2,569,190	2,263	\$1,104,620	11,507	\$455,900	11,093	\$1,929,166	1,365	\$109,414
1918.....	27,032	3,199,850	2,379	1,003,316	11,947	409,636	10,220	1,620,002	2,486	166,896
1917.....	24,932	2,506,957	2,137	970,783	12,821	363,873	8,215	1,909,985	2,259	153,396
1916.....	25,949	2,378,377	2,115	922,736	14,567	427,669	6,992	882,784	3,264	145,166
1915.....	25,681	2,304,339	2,533	940,013	13,968	414,422	6,899	826,218	3,231	121,686
1914.....	23,440	2,127,403	2,319	810,950	13,218	505,492	5,553	689,517	2,350	121,444
1913.....	22,768	2,065,124	2,271	762,264	12,290	414,708	5,585	778,117	2,647	110,087
1912.....	22,424	1,940,414	2,516	732,525	12,420	432,470	5,113	673,289	2,375	102,120
1911.....	11,781	1,861,630	1,995	687,039	6,582	582,919	3,204	591,672	(*)	(*)
1900.....	2,901	953,573	2,094	749,143	(*)	(*)	(*)	177,169	807	27,256
Arizona.....	5,905	688,150	329	144,246	2,748	75,211	2,473	436,979	355	31,714
Camp Verde.....	123	33,270	4	1,560			119	31,710		
Colorado River.....	189	78,045	11	7,420	39	2,890	119	66,920	17	825
Fort Apache.....	1,435	39,615	35	16,064	1,409	23,551				
Fort Mojave.....	39	4,318	7	3,720					32	568
Havasupai.....	55	4,399	3	1,320	19	191	33	2,888		
Kaltab.....	75	4,197	1	240	49	1,002	23	2,235	2	720
Leupp.....	172	19,553	19	9,028	113	6,550	2	750	38	3,225
Moqui.....	208	15,166	36	13,608	167	4,568				
Navajo.....	370	29,458	67	32,899	302	6,239				800
Phoenix.....	285	27,087	21	10,620	109	1,021			155	15,396
Pima.....	59	23,649	39	19,359	20	4,290				
Salt River.....	513	45,832	9	2,760	33	1,372	459	39,200	12	2,500
San Carlos.....	668	41,318	43	12,118	300	13,000	325	16,200		
Sells.....	1,539	267,368	13	4,452	37	5,049	1,239	252,376	50	5,500
Truxton Canon.....	46	4,397	5	3,000	41	1,357				
Western Navajo.....	337	37,558	16	6,108	119	4,100	154	24,700	48	2,650
California.....	3,428	511,664	109	43,460	448	26,833	2,374	378,620	497	57,751
Bishop.....	30	4,615	4	1,440	4	55			22	3,120
Campo.....	57	7,075	3	1,500			54	5,575		
Digger.....	55	31,870					55	31,870		
Fort Bidwell.....	459	30,600	4	1,900	35	3,700	350	15,000	70	7,000
Fort Yuma.....	579	32,324	14	4,620	96	8,634	444	67,899	25	1,206
Greenville.....	512	123,460	6	3,680	26	4,220	410	108,550	70	21,000
Hoop Valley.....	526	43,093	25	14,288	221	7,965	250	32,900	30	3,000
Maki.....	283	41,635	12	3,708	4	57	267	37,900		
Pala.....	270	42,743	12	4,248	16	1,250	241	37,005	1	240
Round Valley.....	33	2,661	5	2,466	28	201				
Sherman Institute.....	273	26,275	9	5,800					264	20,975
Soboba.....	238	52,452	14	4,856	1	540	208	45,740	15	1,216
Tule River.....	113	8,861	1	360	17	391	95	8,806		
Colorado.....	116	9,755	11	4,920	95	4,255	10	580		
Southern Ute.....	91	5,955	6	2,520	75	2,855	10	580		
Ute Mountain.....	25	3,800	5	2,400	20	1,400				
Florida: Seminole.....	186	5,300	1	2,000			185	3,300		
Idaho.....	351	47,118	38	19,912	261	11,206	52	16,000		
Ocean d'Almeida.....	65	21,154	9	4,764	4	450	52	16,000		
Fort Hall.....	274	13,664	17	7,808	257	10,756				
Fort Lapwai.....	12	7,300	12	7,300						
Iowa: Sac and Fox.....	14	5,578	9	5,180		396				
Kansas.....	102	17,707	23	14,900					79	2,807
Haskell Institute.....	90	10,007	11	7,300					79	2,807
Kokopoo.....	12	7,700	12	7,700						

* Does not include about 10,000 Indians enlisted in the Army and Navy.

* Included with adults by private parties.

* No data available.

* Formerly San Xavier.

TABLE 13.—*Employment of Indians during fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Total employed.		Indians employed by United States Indian Service.				Employed by private parties.			
			Regular employees.		Irregular employees.		Adults.		Minors or outing pupils.	
	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.
Michigan.....	21	\$3,897	18	\$3,780	3	\$117				
Mackinac.....	4	837	1	720	3	117				
Mount Pleasant.....	17	8,060	17	8,060						
Minnesota.....	905	173,310	157	76,256	472	23,594	269	\$63,140	7	\$330
Pond du Lac.....	9	3,890	9	3,890						
Grand Portage.....	80	12,911	6	3,640	11	71	63	9,189		
Leech Lake.....	170	45,933	32	15,393	4	274	134	30,400		
Nett Lake.....	69	12,401	6	2,330	18	1,021	45	8,500		
Pipestone.....	24	8,390	7	3,590	4	430	6	4,080	7	330
Red Lake.....	317	56,822	45	19,423	251	21,414	21	15,980		
Vermillion Lake.....	76	6,968	6	4,540	70	2,428				
White Earth.....	160	26,036	46	23,080	114	2,956	(1)	(1)		
Montana.....	1,224	328,522	192	95,061	651	27,361	381	216,060		
Blackfeet.....	138	112,698	28	21,538			100	91,060		
Crow.....	122	21,737	40	15,276	82	6,511	(1)	(1)	(1)	(1)
Flathead.....	234	66,791	14	6,048	73	1,743	147	59,000		
Fort Belknap.....	86	20,606	25	12,908	47	2,358	14	5,340		
Fort Peck.....	105	28,139	37	18,929	30	2,200	38	17,010		
Rocky Boy's Agency.....	105	45,411	2	384	21	1,377	82	43,650		
Tongue River.....	433	23,180	36	20,008	397	13,172				
Nebraska.....	63	15,776	30	15,138	33	638				
Genoa.....	14	7,350	14	7,350						
Omaha.....	4	2,160	4	2,160						
Winnebago.....	45	6,266	12	5,628	83	638		(1)	(1)	
Nevada.....	1,354	218,189	53	22,083	195	7,443	1,006	188,212	10	500
Carson.....	112	19,381	16	8,100	21	3,159	75	8,122		
Fallon.....	213	34,530	4	2,040	18	290	191	32,190		
Fort McDermitt.....	102	29,952	3	789	4	113	95	29,060		
Mojave River.....	84	5,968	3	552	40	1,086	41	4,400		
Nevada.....	10	3,444	10	3,444						
Reno, special agent.....	420	95,440			20	440	* 400	* 95,000		
Walker River.....	203	13,971	5	2,424	22	847	178	10,700		
Western Shoshone.....	210	15,492	12	4,684	70	1,558	118	8,750	10	500
New Mexico.....	1,872	250,089	207	90,208	695	35,334	708	113,998	262	19,499
Albuquerque.....	178	10,745	12	5,700	70	971			96	4,074
Jicarilla.....	310	47,159	36	16,700	169	16,208	106	14,251		
Mescalero.....	257	18,426	29	14,609	202	1,902	26	1,924		
Pueblo Bonito.....	45	8,963	17	7,380	3	308			26	1,300
Pueblo Day School.....	317	91,177	45	19,064	24	232	248	71,281		
San Juan.....	476	51,288	42	12,604	180	14,382	227	28,252	27	1,000
Santa Fe.....	147	11,572	13	6,980	20	487			114	4,125
Zuni.....	142	10,739	13	6,000	27	849	102	3,290		
New York: New York Agency.....	29	203			29	203				
North Carolina: Cherokee.....	422	66,836	14	6,300	96	2,936	310	57,600		
North Dakota.....	1,768	85,128	159	69,120	1,609	15,998				
Bismarck.....	7	3,890	7	3,890						
Fort Berthold.....	77	11,448	23	10,098	54	1,350				
Fort Totten.....	41	13,442	24	11,920	17	1,522				
Standing Rock.....	1,570	41,027	74	29,819	* 1,496	* 11,208	(1)	(1)		
Turtle Mountain.....	61	9,391	19	7,473	42	1,918				
Wahpeton.....	12	5,940	12	5,940						

* No data.

* Estimated.

* 1918 report.

TABLE 13.—*Employment of Indians during fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Total employed.		Indians employed by United States Indian Service.				Employed by private parties.			
			Regular employees.		Irregular employees.		Adults.		Minors or outing pupils.	
	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.
Oklahoma.....	738	\$194,507	281	\$179,344	364	\$6,600	56	\$6,920	37	\$1,642
Cantonment.....	61	4,661	6	3,049	15	411	40	1,200		
Cheyenne and Arapaho.....	30	7,789	19	7,520	11	269				
Chillicothe.....	292	13,263	19	10,180	241	1,543			32	1,540
Choctaw-Chickasaw Sanatorium.....	1	500	1	500						
Five Civilized Tribes.....	90	74,989	90	74,989						
Klowna.....	75	24,320	50	23,120	25	1,200				
Osage.....	24	19,800	24	19,800						
Otoe.....	3	1,740	3	1,740						
Pawnee.....	12	8,610	9	5,610			3	3,000		
Sage.....	54	10,943	16	7,340	25	883	13	2,720		
Seneca.....	13	8,160	11	6,960	2	1,200				
Shawnee.....	15	7,100	15	7,100						
Total Western Oklahoma.....	670	181,865	263	167,899	319	5,506	56	6,920	32	1,540
Five Civilized Tribes schools.....	68	12,642	18	11,445	45	1,094			5	103
Schools—Supervisor.....	4	4,450	4	4,450						
Armstrong Academy.....	14	2,131	3	1,885	6	143			5	103
Cherokee Training.....	12	990	2	865	10	125				
Jones Academy.....	12	1,290	1	900	11	390				
Mekuskey Academy.....	8	22			8	22				
Nuyaka Boarding.....	13	1,264	4	1,125	9	139				
Tuskaahoma Academy.....	3	995	2	720	1	275				
Wheelock Academy.....	2	1,500	2	1,500						
Oregon.....	398	57,774	60	44,676	329	13,068				
Klamath.....	225	22,010	18	14,000	207	8,010	(1)	(1)	(1)	(1)
Salem.....	42	13,142	17	10,920	25	2,223				
Siletz.....	6	2,620	6	2,620						
Umatilla.....	40	8,662	11	7,424	29	1,268				
Warm Springs.....	85	11,320	17	9,712	68	1,608				
South Dakota.....	2,796	285,672	319	136,265	1,594	41,800	858	106,107	25	1,600
Cheyenne River.....	372	22,215	44	17,228	328	4,987	(1)	(1)		
Crow Creek.....	79	14,460	27	13,268	52	1,192				
Flandreau.....	61	11,796	15	8,540	21	1,756			25	1,500
Hope.....	1	500	1	500						
Lower Brule.....	130	21,874	12	5,844	94	1,630	24	14,400		
Pierre.....	59	2,928	5	2,420	54	508				
Pine Ridge.....	822	85,961	105	42,240	233	5,214	484	38,507		
Rapid City.....	26	5,348	8	4,850	18	498				
Rosebud.....	1,155	100,787	70	22,540	735	25,047	350	53,200		
Sisseton.....	65	9,616	13	8,755	52	861				
Yankton.....	26	10,187	19	10,080	7	107				
Utah.....	961	128,877	23	10,364	573	15,613	365	102,900		
Goshute.....	381	103,830	1	540	35	1,290	345	102,000		
Shivwits.....	119	6,267	2	324	97	5,043	20	900		
Uintah and Ouray.....	461	18,780	20	9,500	441	9,280				

1 No data.

2 Formerly Springfield.

TABLE 13.—*Employment of Indians during fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Total employed.		Indians employed by United States Indian Service.				Employed by private parties.			
			Regular employees.		Irregular employees.		Adults.		Minors or outing pupils.	
	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.
Washington.....	867	\$134,249	93	\$45,504	320	\$10,475	454	\$78,270	.....	.....
Colville.....	224	13,776	19	8,208	205	5,568	.....	.....	.....	.....
Cushman.....	195	55,560	11	5,280	.....	.....	184	50,300	.....	.....
Neah Bay.....	14	4,847	9	4,760	5	87	.....	.....	.....	.....
Spokane.....	124	13,337	11	3,848	27	799	86	8,650	.....	.....
Taholah.....	29	5,024	9	4,704	.....	.....	20	320	.....	.....
Tulalip.....	189	28,562	16	7,620	9	1,842	164	19,000	.....	.....
Yakima.....	92	13,083	18	11,004	74	2,079	(1)	(1)	(1)	(1)
Wisconsin.....	2,428	325,758	99	51,873	734	115,755	1,502	155,460	93	\$2,670
Grand Rapids.....	360	15,785	.....	.....	.....	.....	349	14,385	11	1,400
Hayward.....	572	38,726	18	8,726	45	1,100	459	27,950	50	950
Keshena.....	603	126,303	33	16,683	570	109,620	.....	.....	.....	.....
Lac du Flambeau.....	132	14,906	16	10,104	116	4,804	.....	.....	.....	.....
Leona.....	35	2,645	1	720	.....	.....	35	1,925	.....	.....
La Pointe.....	456	52,767	5	2,760	1	7	450	50,000	.....	.....
Onesida.....	15	7,320	15	7,320	.....	.....	.....	.....	.....	.....
Red Cliff.....	245	63,560	4	2,040	.....	.....	209	61,200	32	320
Tomah.....	9	3,744	7	3,520	2	224	.....	.....	.....	.....
Wyoming: Shoshone....	280	30,182	29	14,060	251	16,132	.....	.....	.....	.....

¹ No data.

TABLE 14.—Vital statistics, housing and disease during fiscal year ended June 30, 1919.

States and superintendencies.	Number of Indians.	Births and deaths.			Disease.					Num-ber of families using milch cows.	Housing.		Houses having wooden floors.		
		Births.	Deaths.		Indians exam-ined.	Found with—			Families living in—						
			Total.	Under 3 years.		Due to tuber-culosis.	Latent tuber-culosis.	Active tuber-culosis.	Tra-choma.		Tuber-culosis.	Perma-nent houses.		Tents, tapces, etc.	
Grand total.....	205,468	6,344	19,462	1,644	1,330	62,756	2,829	3,293	971	24,278	28,099	6,633	43,055	10,935	28,144
Arizona.....	42,346	1,408	2,254	291	244	11,702	136	430	1,119	2,802	3,839	91	3,922	5,219	768
Camp Verde.....	436	10	18	3	.....	135	2	3	13	7	32	.....	.....	118	.....
Colorado River.....	1,141	32	80	19	.....	1,098	33	147	65	570	32	6	98	278	65
Fort Apache.....	2,466	81	80	26	12	1,279	.....	28	45	160	80	.....	5	678	5
Havasupai.....	176	9	9	2	3	.....	.....	.....	.....	.....	11	.....	8	39	18
Kaibab.....	105	4	2	.....	.....	16	.....	1	.....	.....	3	.....	6	18	8
Leupp.....	1,441	65	65	.....	.....	110	.....	.....	37	184	426	.....	22	297	.....
Moqui.....	4,000	120	215	85	17	814	.....	8	102	510	1,550	.....	494	300	60
Navajo.....	11,280	386	720	(¹)	(¹)	2,900	50	50	500	1,060	1,450	32	788	1,471	375
Pima.....	6,260	180	308	54	86	775	16	25	110	126	190	4	1,020	263	63
Salt River.....	1,274	45	59	8	4	376	22	9	34	66	36	.....	90	570	27
San Carlos.....	2,515	72	200	17	7	527	13	25	36	38	36	.....	1,184	75	80
Sells (San Xavier).....	4,465	200	170	25	30	2,722	(¹)	26	52	90	330	50	1,584	75	60
Truxton Canon.....	427	14	28	2	2	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	.....	60	1,115	10
Western Navajo.....	6,360	190	300	50	50	1,350	.....	100	126	600	190	.....	2,819	409	7
California.....	13,215	348	433	37	63	4,471	87	67	497	526	1,100	195	2,819	409	1,059
Bishop.....	1,518	10	32	.....	1	750	3	6	21	58	21	6	220	60	125
Campo.....	229	4	4	.....	.....	107	.....	.....	6	.....	7	.....	13	46	7
Digger.....	280	2	23	.....	.....	3	.....	1	5	.....	6	.....	71	.....	71
Fort Bidwell.....	719	16	31	3	11	394	3	5	210	57	800	.....	80	138	60
Fort Yuma.....	968	41	51	16	6	828	12	16	4	29	4	.....	205	42	35
Greenville.....	2,924	126	123	7	17	190	8	6	49	220	373	10	704	66	275
Hoope Valley.....	1,712	17	29	.....	10	350	18	20	45	50	50	20	390	300	300
Maliki.....	628	14	22	1	1	180	2	1	7	14	10	6	118	31	94
Tala.....	1,054	43	35	6	9	386	19	4	1	45	19	31	203	.....	95
Round Valley.....	1,842	53	32	3	3	500	4	.....	38	4	50	55	474	.....	354
Soboba.....	1,896	12	39	.....	1	436	5	5	12	6	28	59	218	19	118
Tule River.....	445	10	12	1	1	330	13	.....	105	37	238	.....	141	17	126

	821	13	89	10	10	10	120	10	4	38	26	110	124	141	52
Colorado.....															
Southern Uto.....	341	7	42	5	1	120	16		4	38	26	110	124	2	52
Ute Mountain.....	480	11	47	5	9								139		
Florida: Seminole.....	573	1	13		3		3				3			72	
Idaho.....	4,066	120	234	40	37	1,922	26		76	82	335	619	315	303	606
Coeur d'Alene.....	818	33	44	14	1	480	13		20	57	89	73	109	245	265
Fort Hall.....	1,768	59	83	18	24	783			45	13	188	510	18	148	76
Fort Lapwai.....	1,486	28	77	8	12	689	13		11	12	78	36	191	366	366
Iowa: Sac and Fox.....	358	13	26	8	6	70			5	14	5	90		50	40
Kansas.....	1,441*	54	29	10	5	90				52	6	234	96		429
Kikapoo.....	680	31	11	2	2	90				52	6	136	49	151	207
Potawatomi.....	781	23	18	8	3	(*)						98	49	347	222
Michigan: Mackinac.....	1,095	30	25		1				2		60	15	22		332
Minnesota.....	12,447	423	321	61	128	2,273	185		214	237	2,227	1,949	513	2,924	2,335
Pond du Lac.....	1,074	37	27	6							104	50	70	194	200
Grand Portage.....	340	10	8	2		166	3		2		7		1	109	101
Leech Lake.....	1,733	62	91		61	1,412	88		68	38	173	175	80	962	397
Nett Lake.....	590	20	43	13	28						14	10	9	127	127
Nipistone (Birch Cooley).....	407	3	4	1	2	237			7	25	3	14	2	21	21
Red Lake.....	1,504	69	47	12	19	469	6		22	40	380	150	151	311	289
White Earth.....	6,794	242	101	27	18		* 67		* 115	* 134	* 1,598	* 1,560	250	1,300	1,300
Montana.....	12,138	398	530	130	101	4,641	285		196	1,321	1,506	3,276	610	2,865	1,888
Blackfeet.....	2,883	* 96	* 82	* 28	* 18	* 1,920	37		56	650	239	1,100	180	* 606	* 520
Crow.....	1,707	75	81	12	12	960	107		39	115	211	400	60	383	300
Flathead.....	2,432	46	56	11	4	(*)	(*)		(*)	(*)	(*)	(*)	330	519	366
Fort Belknap.....	1,198	46	94	25	2	800	29		10	140	401	800	20	358	200
Fort Peck.....	2,031	75	79	16	28	600	76		76	65	265	200	20	450	325
Rocky Boy's Agency.....	481	18	23	11	5	101	42		14	26	66	28	5	52	28
Tongue River.....	1,416	42	115	27	32	270	(*)		(*)	325	334	750	25	487	150
Nebraska.....	2,448	72	87	10	13	854	14		46	38	120	100	6	624	595
Omaha.....	1,380	46	43	10	7	(*)	(*)		(*)	(*)	(*)	(*)			333
Winnebago.....	1,068	26	44		6	854	14		46	38	120	100	6	261	262

* No physician, data not available.

* No report.

† Excess of deaths due to Spanish influenza.

* 1918 report.

* Unknown.

* Estimated.

TABLE 14.—Vital statistics, housing, and disease during fiscal year ended June 30, 1919—Continued.

States and superintendencies.	Births and deaths.			Disease.				Housing.	Houses having wooden floors.						
	Number of Indians.	Deaths.			Found with—										
		Births.	Under 3 years.		Due to tuberculosis.	Indians examined.									
			Total.	Latent tuberculosis.		Active tuberculosis.	Tubercu-losis.			Trachoma.	Trachoma.				
Nevada.....	10,840	221	365	58	14	1,486	71	33	225	236	2,465	60	1,120	1,210	620
Fallon.....	408	16	15	.....	.....	287	20	7	37	41	64	5	141	1	67
Fort McDermitt.....	323	8	37	.....	6	.....	.....	.....	.....	101	180	3	25	85	10
Moapa River.....	111	1	7	1	.....	100	.....	.....	.....	23	35	.....	20	9	11
Aprada.....	526	15	21	6	1	430	6	11	23	34	50	.....	145	.....	109
Walker River.....	900	16	20	4	7	170	4	6	28	21	10	.....	129	112	105
Western Shoshone.....	675	15	15	7	.....	529	41	7	116	48	116	25	60	3	27
Reno, special agent.....	18,000	160	250	40	.....	.....	.....	.....	.....	2,000	2,000	15	600	1,000	300
New Mexico.....	20,581	726	1,528	388	188	6,766	267	246	1,611	4,559	2,673	184	3,712	1,713	469
Jicarilla.....	603	39	57	31	42	480	55	85	24	240	48	14	170	30	70
Mescalero.....	613	20	42	19	6	142	15	19	48	214	180	10	47	188	47
Pueblo Bonito.....	2,275	160	599	90	60	1,260	6	50	439	283	800	.....	80	420	.....
Pueblo Day Schools.....	8,724	261	243	66	34	2,607	75	39	500	114	734	170	2,485	.....	262
San Juan.....	6,560	218	560	183	45	1,380	116	40	600	3,680	900	(*)	200	1,075	30
Zuni.....	1,816	28	27	9	1	1,900	.....	13	.....	8	11	.....	730	.....	60
New York: New York Agency.....	6,100	116	104	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1,600	(*)	1,600
North Carolina: Cherokee.....	2,399	65	83	14	4	270	3	8	4	50	40	300	455	.....	455
North Dakota.....	8,891	319	372	89	66	5,942	275	367	617	1,637	1,496	711	2,468	.....	1,248
Fort Berthold.....	1,176	44	74	23	14	441	3	15	45	18	200	40	275	.....	225
Fort Totten.....	979	22	27	13	19	625	55	70	190	345	550	20	275	.....	180
Standing Rock.....	3,427	190	189	35	21	3,338	207	262	353	1,219	666	101	775	.....	1,500
Turtle Mountain.....	3,309	93	82	17	12	1,538	10	20	29	55	80	560	1,143	.....	793
Oklahoma.....	14,874	516	618	128	97	4,814	199	235	1,753	1,971	4,912	952	4,288	350	4,270
Cantonment.....	733	27	75	12	4	410	.....	60	40	226	110	6	75	151	137
Cheyenne and Arapaho.....	1,205	31	78	22	19	280	61	.....	180	98	180	18	330	31	313

Klona.....	4,574	186	202	59	35	2,800	99	150	1,100	1,320	3,000	250	1,100	100	1,025
Oso.....	2,154	464	61	.....	6	40	1	1	6	42	80	80	1,100	.....	1,046
Oto.....	520	19	15	8	1	71	4	1	43	20	156	100	1,057	.....	226
Payne.....	727	20	15	5	.....	100	5	.....	3	28	110	20	157	.....	226
Prairie.....	1,072	40	23	2	2	280	.....	.....	100	26	400	3	316	.....	313
Sac and Fox.....	678	24	26	6	2	145	6	.....	28	6	272	27	315	.....	307
Sage.....	742	32	28	9	9	718	33	23	225	90	556	12	134	80	108
Sawtooth.....	1,725	347	47	4	19	.....	.....	.....	.....	.....	.....	145	134	.....	255
Shawnee.....	735	17	31	.....	.....	.....	.....	.....	.....	15	48	191	734	18	1,140
Oregon.....	4,407	96	195	46	30	1,213	38	45	316	383	695	220	1,062	113	1,396
Klamath.....	1,154	27	65	16	10	450	28	14	231	125	440	100	487	.....	480
Silet.....	1,158	10	42	6	6	190	3	5	15	12	5	35	153	.....	132
Umatilla.....	1,167	32	55	16	9	475	7	23	46	76	50	60	223	8	504
Warm Springs.....	928	18	33	8	5	86	.....	3	33	150	200	25	220	105	220
South Dakota.....	22,491	680	1,237	176	188	9,544	955	910	989	4,143	1,914	1,351	7,844	125	4,287
Cheyenne River.....	2,772	80	153	33	29	1,218	71	65	204	581	180	185	1,342	.....	732
Crow Creek.....	964	27	41	12	7	245	12	7	111	44	180	68	284	.....	231
Handren.....	283	17	18	3	1	430	16	14	14	71	84	4	194	.....	180
Lower Brule.....	515	17	23	6	2	35	3	.....	14	71	200	25	104	.....	115
Pine Ridge.....	7,213	233	354	55	50	3,133	471	481	170	1,815	205	402	2,576	46	1,250
Rosebud.....	5,366	162	497	49	65	2,350	323	109	150	1,180	400	150	1,700	25	475
Sisseton.....	2,304	75	56	5	13	700	52	36	57	135	550	150	450	.....	450
Yankton.....	3,079	80	95	13	21	1,353	7	198	200	316	175	150	884	54	884
Utah.....	1,632	47	119	21	20	703	18	31	170	86	398	2	238	127	210
Goshute.....	397	7	22	4	7	15	.....	8	53	23	75	.....	40	30	40
Shivwits.....	125	5	9	1	5	25	2	3	25	5	95	.....	36	17	17
Utah and Oursy.....	1,110	35	88	16	8	663	16	20	92	58	228	2	162	80	153
Washington.....	10,988	279	308	70	61	2,575	58	217	408	1,768	1,134	248	2,722	56	2,485
Colville.....	2,518	41	136	18	20	904	.....	78	240	340	235	98	598	4	598
Cushman.....	2,148	64	26	5	5	.....	2	.....	80	80	170	49	404	.....	398
Neah Bay.....	669	8	16	3	.....	.....	.....	18	11	61	53	13	194	.....	151
Spokane.....	617	18	10	.....	1	351	.....	9	.....	20	.....	50	158	.....	161
Taholah.....	783	13	23	5	6	66	10	46	57	157	176	37	250	2	96
Tulalip.....	1,321	48	84	22	18	855	10	46	57	157	176	37	316	2	281
Yakima.....	2,533	487	103	17	11	370	46	66	100	1,120	500	.....	802	50	802

* Partly reported.

† Estimated.

‡ Not reported.

§ 1918 report.

|| Includes scattered Indians in California.

TABLE 14.—*Vital statistics, housing, and disease during fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Number of Indians.	Births and deaths.			Disease.				Num-ber of families using milch cows.	Housing.		Houses having wooden floors.	
		Births.	Deaths.		Found with—		Estimated hav- ing—			Families living in—			
			Total.	Under 3 years.	Due to tuber- culosis.	Latent tuber- culosis.	Active tuber- culosis.	Tra- choma.		Tuber- culosis, choma.	Perma- nent houses.		Ten- ta, tepees, etc.
Wisconsin.....	9, 605	287	39	51	193	162	221	1, 164	490	752	2, 418	179	2, 200
Grand Rapids.....	1, 233	31	5	10	261	12	79	46	130	8	119	154	119
Hayward.....	1, 296	138	7	9	439	17	8	36	166	50	450	.....	450
Keshena.....	1, 733	66	16	11	1, 156	12	65	42	200	120	404	.....	225
Lac du Flambeau.....	1, 754	19	4	4	215	14	35	50	69	20	232	.....	203
Loma.....	260	6	9	2	80	12	3	4	33	80	92	25	92
La Pointe.....	1, 082	51	23	7	670	102	31	10	264	10	150	460	500
Onelia.....	2, 680	69	49	3	179	7	.....	.....	216	300	477	.....	477
Red Cliff.....	527	7	2	8	307	24	.....	.....	29	24	194	.....	194
Wyoming: Shoshone.....	1, 712	107	18	.....	(¹)	5	.....	.....	585	20	125	598	50

SUMMARY.⁴

Birth rate per 1,000 Indian population.....

Death rate per 1,000 Indian population (including influenza deaths).....

Death rate per 1,000 Indian population (excluding influenza deaths).....

¹ Estimated.² 1913 report.³ No regular physician.⁴ Exclusive of Five Civilized Tribes in which the birth rate exceeds the death rate in a normal ratio.

Birth rate per 1,000 Indian population..... 30.92
 Death rate per 1,000 Indian population (including influenza deaths)..... 44.96
 Death rate per 1,000 Indian population (excluding influenza deaths)..... 24.16

TABLE 15.—Hospitals and sanatoria in Indian Service, fiscal year ended June 30, 1919.

States and superintendencies.	Agency or school, hospital or sanatorium.	Number.	Character of construction.	Capacity.	Patients in hospital June 30, 1918.	During fiscal year 1919.			Remaining in hospital June 30, 1919.
						Admitted.	Total treated.	Discharged.	
Total, 1919		88		2,474	515	18,598	19,107	18,121	526
1918		87		2,411	505	18,536	17,441	16,725	522
1917		81		2,273	488	16,493	16,440	15,156	606
1916		81		2,263	352	15,814	15,806	14,696	529
1915		74		2,045	402	11,709	12,501	11,848	467
1914		151		1,482	457	11,108	11,291	11,086	424
1913		48		1,358	368	9,275	9,711	9,281	478
1912		153		1,264	268	8,257	9,515	9,111	308
1911		59		1,268	280	8,078	8,408	7,940	468
1910		5				2,178			
1909		4				2,198			
1898		16		485	115	2,724	2,839	2,561	150
Arizona									
Colorado River.	Agency	1	Adobe	3		36	36	36	2
Fort Apache.	School.	1	Frame	40		202	202	198	1
Fort Mojave.	Agency	1	Brick	8	2	260	262	256	5
Leupp.	Agency	1	Stone	8		125	126	122	2
Moqui.	Agency	1	do	40		155	155	137	7
Navajo.	School.	1	do	40		591	591	474	49
Do.	Sanatorium.	1	Frame	20	13	573	591	474	49
Phoenix.	School.	1	do	66	7	597	604	597	3
Do.	Sanatorium.	1	Brick	120	79	59	138	83	76
Pima.	Agency	1	Frame	60	9	417	426	399	11
San Carlos.	Agency	1	do	4		7	7	6	
Do. ¹	Camp	1	Camp	15		103	103		
Sells.	Agency	1	Stone	40					
Truett Canon.	School.	1	Adobe	40					
Do.	Agency	1	Brick	8					
Do.	Camp	1	Camp	5					
Western Navajo.	School.	1	Stone	8		40	40	24	0
						150	150	145	5

¹ Does not include rooms in dormitories used for ill pupils.² Includes rooms in dormitories used for ill pupils.³ Cases treated during year by physicians not all in hospitals.⁴ 1918 report.⁵ Formerly Rice Station School.⁶ Not completed June 30, 1919.

TABLE 15.—Hospitals and sanatoria in Indian Service, fiscal year ended June 30, 1919.—Continued.

States and superintendencies.	Agency or school, hospital or sanatorium.	Number.	Character of construction.	Capacity.	Patients in hospital June 30, 1918.	During fiscal year 1919.				Remaining in hospital June 30, 1919.
						Admitted.	Total treated.	Discharged.	Died.	
California.....		6		177	20	1,813	1,833	1,706	19	13
Bishop.....	Agency.....	1	Frame.....	6		2	2	1	1	
Fort Bidwell.....	School.....	1	do.....	12		276	276	275	1	
Fort Yuma.....	School and agency.....	1	do.....	25	10	571	581	560	3	
Greenville.....	do.....	1	do.....	9	1	104	106	104	1	0
Hoopa Valley.....	do.....	1	do.....	25	6	120	126	125	1	
Sherman Institute.....	School.....	1	Brick.....	100	3	650	653	632	12	9
Idaho.....		4		152	33	93	131	91	5	33
Coeur d'Alene.....	School and agency.....	1	Brick.....	30		19	19	19		
Fort Hall.....	Agency.....	1	Stone.....	4		3	3	3		
Do.....	School.....	1	do.....	3						
Fort Lapwai.....	Sanatorium.....	1	Frame.....	110	33	71	109	60	5	35
Iowa: Sac and Fox.....	do.....	1	Brick.....	80	30	44	83	40	9	34
Kansas: Haskell Institute.....	School.....	1	do.....	70	4	1,053	1,057	1,044	8	5
Michigan: Mount Pleasant.....	do.....	1	do.....	24		309	309	309		
Minnesota.....		5		108	19	1,284	1,283	1,249	21	13
Fond du Lac.....	Agency.....	1	Frame.....	30	6	200	208	200	3	3
Leech Lake.....	School.....	1	do.....	18		428	428	413	11	4
Pipestone.....	School.....	1	Stone.....	16		138	138	138		
Red Lake.....	Agency and school.....	1	Frame.....	30	5	243	248	243	2	3
White Earth.....	do.....	1	do.....	24	8	255	263	255	5	8
Montana.....		5		71	4	438	442	424	14	4
Blackfeet.....	Sanatorium.....	1	Frame.....	24	3	131	134	131		3
Crow.....	Agency and school.....	1	do.....	24	1	114	115	105	9	1
Flathead.....	Agency.....	1	do.....	5						
Do.....	Tent houses.....	1	Frame and canvas.....	5						
Fort Peck.....	Agency and school.....	1	Brick.....	14		198	198	198	5	

	2	126	13	847	860	830	19	11
Nebraska								
Genoa.....	1	86		420	420	419	1	
Winnebago.....	1	50	13	427	440	411	13	11
Nevada.....	4	62	8	647	655	647	7	1
Carson.....	1	14		235	235	235		
Do.....	1	20	8	377	385	380	5	
Sanatorium.....	1	8		10	10	7	2	1
Agency and school.....	1	20		25	25	25		
Agency.....	1							
Western Shoshone.....	11	231	41	2,025	2,066	1,991	40	33
New Mexico.....								
Albuquerque.....	1	44		372	372	372		
do.....	1	8						
Jicarilla.....	1	25	6	126	132	125	4	3
do.....	1	20	7	151	153	147	4	7
Mescalero.....	1	12	1	262	263	253	10	
Pueblo Bonito.....	1	34	25	34	59	34	4	21
Pueblo Day Schools.....	1	8						
San Juan.....	1			630	630	612	15	3
School.....	1							
Brick.....	1							
Do.....	1	140						
Agency.....	1							
Stone.....	1							
Santa Fe.....	1	50		327	327	325	2	
do.....	1	20	2	123	125	123	1	1
School.....	1							
Brick.....	1							
Stone.....	1							
Agency and school.....	1	26		250	250	243	7	
North Carolina: Cherokee.....	1							
North Dakota.....	4	94	21	718	739	701	18	20
Fort Totten.....	1	20		110	110	109	1	
School.....	1	30	7	218	225	207	13	5
Agency.....	1	20	13	48	61	44	2	15
Turtle Mountain.....	1	24	1	312	343	341	2	
Wahpeton.....	1							
School.....	1							
Brick.....	1							
Oklahoma.....	7	191	69	2,028	2,097	2,012	21	64
Cheyenne and Arapaho.....	1	20	12	166	178	158	4	16
Sanatorium.....	1	35	2	594	594	583	1	2
Chilocco.....	1	40	32	88	120	85	5	30
Choctaw-Chickasaw.....	1	50	23	933	976	950	10	18
Kiowa.....	1	8		34	34	34		
Agency and school.....	1							
Osage.....	1	6		123	123	123		
School.....	1							
Paynee.....	1	12		80	80	79	1	
do.....	1							
Sage.....	1							
Oregon: Salem.....	1	36	4	604	608	579	23	6
do.....	1							

* Closed for repairs, fiscal year 1919.
 † Capacity, including sleeping porches.
 ‡ Closed during fiscal year 1919.
 § 1918 report.
 † Catholic Mission Hospital; Government physician.
 * Capacity increased fiscal year 1919.
 ‡ Statistics from supervisor's report.

TABLE 15.—Hospitals and sanatoria in Indian Service, fiscal year ended June 30, 1919—Continued.

States and superintendencies.	Agency or school, hospital or sanatorium.	Number.	Character of construction.	Capacity.	Patients in hospital June 30, 1918.	During fiscal year 1919.				Remaining in hospital June 30, 1919.
						Admitted.	Total treated.	Discharged.	Died.	
South Dakota.....		8		266	85	1,527	1,612	1,457	57	98
Canton Asylum.....	General.....	1	Brick.....	92	81	22	103	3	11	89
Cheyenne River.....	Agency and school.....	1	do.....	36	1	250	251	269	7	5
Crow Creek.....	do.....	1	Frame.....	12		69	69	65	3	1
Flandreau.....	School.....	1	do.....	24	1	429	430	426	3	1
Pierre.....	do.....	1	Brick.....	30		191	191	176	16	
Pine Ridge.....	do.....	1	do.....	20		156	156	155	1	
Rapid City.....	do.....	1	do.....	12		160	160	154		
Rosebud.....	Agency.....	1	do.....	30	2	250	252	240	10	2
Utah: Uintah and Ouray.....	do.....	1	Frame.....	12	5	80	85	74	8	3
Washington.....		4		80	19	980	949	919	20	10
Cushman.....	School.....	1	Frame.....	45	11	588	599	587	11	1
Spokane.....	Agency.....	1	do.....	20	8	68	76	64	3	9
Tulalip.....	School.....	1	do.....	12		88	88	84	4	
Yakima.....	do.....	1	do.....	12		186	186	184	2	
Wisconsin.....		5		94	11	1,198	1,209	1,154	36	19
Hayward.....	School.....	1	Brick.....	10		324	324	315	9	
Keshena.....	Agency.....	1	Frame.....	20	11	162	173	133	22	18
Do.....	Neopit Mills.....	1	do.....	6		13	13	15	3	
Ouelia.....	School.....	1	do.....	8		199	199	197	2	
Tonah.....	do.....	1	do.....	40		495	495	494		1
Wyoming: Shoshone !.....	Agency.....	1	Stone.....	30						

!Not completed, fiscal year 1919.

TABLE 10.—Indians self-supporting and Indians receiving rations and miscellaneous supplies during fiscal year ended June 30, 1919.¹

States and reser- vations.	Indians receiving rations.						Indians receiving miscellaneous supplies.					
	Able-bodied adult Indians self-supporting.	Total.		In return for labor.		Without labor equivalent.	Total.		In return for labor.		Without labor equivalent.	
		Receiving rations.	Value of rations.	Number.	Value of rations.		Receiving supplies.	Value of supplies.	Number.	Value of supplies.	Able-bodied.	Dis-abled.
Total, 1919.....	56,304	12,231	\$312,550	784	\$14,479	4,087	7,360	\$298,071	1,591	\$29,534	832	1,786
1918.....	53,243	14,060	381,861	1,327	40,021	4,183	8,570	341,840	2,031	34,454	1,307	1,123
1917.....	58,668	15,065	275,094	1,110	15,264	4,941	9,084	260,830	2,473	31,069	1,647	1,263
1916.....	59,753	14,929	353,557	1,980	19,708	3,907	9,192	334,849	4,188	39,571	1,505	1,610
1915.....	51,761	18,231	297,698	1,326	30,196	6,650	10,266	267,472	4,625	64,024	2,677	1,210
1914.....	52,110	14,987	471,894	1,805	9,475	4,371	9,811	461,919	5,331	72,190	1,684	2,060
1913.....	51,516	17,166	344,024	1,138	13,172	5,338	10,680	330,862	4,468	61,048	2,045	1,450
1912.....	.....	16,679	400,723	1,415	37,262	5,175	10,069	383,470	3,501	45,743	2,035	1,339
1911.....	.....	15,987	395,165	.....	.....	.....	.....	.....	.....	.....	.....	.....
1900.....	.....	57,570	1,231,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
1840.....	.....	.....	11,800	.....	.....	.....	.....	.....	.....	.....	.....	.....
1830.....	.....	.....	11,523	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arizona.....	15,606	610	23,897	1	.....	12	567	23,897	1,022	21,838	162	169
Camp Verde.....	180	23	65	.....	.....	.....	22	65	.....	.....	.....	.....
Colorado River.....	68*	40	1,815	.....	.....	.....	40	1,815	23	314	.....	.....
Fort Apache.....	901	112	760	.....	.....	12	100	300	150	853	150	25
Haystack.....	82	19	128	.....	.....	.....	19	128	.....	.....	.....	.....
Kalish.....	46	4	60	1	(*)	.....	3	60	.....	.....	.....	.....
Leupp.....	428	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moeni.....	1,078	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Navajo.....	4,000	21	400	.....	.....	.....	21	400	192	315	.....	.....
Pima.....	41,500	12	361	.....	.....	.....	12	361	90	3,576	.....	.....
Salt River.....	1,92	30	233	.....	.....	.....	30	233	.....	.....	.....	.....
San Carlos.....	41,000	300	18,445	.....	.....	.....	300	18,445	500	115,000	.....	.....
Sells (San Xavier).....	1,979	.....	.....	.....	.....	.....	.....	.....	45	870	.....	.....
Tucson Canon.....	4,150	50	1,689	.....	.....	.....	50	1,689	.....	.....	.....	.....
Western Navajo.....	2,575	.....	.....	.....	.....	.....	.....	.....	18	368	.....	.....

¹ This table pertains only to Indians on reservations where rations and miscellaneous supplies are issued.

* Only items reported.

* Estimated.

TABLE 16.—*Indians self-supporting and Indians receiving rations and miscellaneous supplies during fiscal year ended June 30, 1919—Continued.*

States and reservations.	Able-bodied adult Indians self-supporting.	Indians receiving rations.						Indians receiving miscellaneous supplies.					
		Total.		In return for labor.		Without labor equivalent.		Total.		In return for labor.		Without labor equivalent.	
		Receiving rations.	Value of rations.	Number.	Value of rations.	Able-bodied.	Dis-abled.	Receiving supplies.	Value of supplies.	Number.	Value of supplies.	Able-bodied.	Dis-abled.
California.....	6,062	316	\$6,585	42	\$843	19	255	105	\$501	31	\$170	9	65
Bishop.....	1,000	17	361	4	130	13	221	22	27	22	27	6	11
Campo.....	77	28	335	.....	.....	17	335	17	33	.....	.....	.....	.....
Digger.....	184	17	761	.....	.....	11	761	17	32	.....	.....	6	11
Fort Bidwell.....	500	31	854	6	81	6	773	38	100	.....	.....	38	100
Fort Yuma.....	529	8	928	.....	.....	8	928	.....	.....	.....	.....	.....	.....
Greenville.....	1,000	16	190	.....	.....	16	190	10	198	.....	.....	10	198
Hoop Valley.....	400	82	747	.....	.....	2	717	3	59	4	49	3	59
Maliki.....	251	15	551	.....	.....	15	551	6	55	5	91	4	36
Pala.....	648	21	354	.....	.....	21	354	9	137	.....	.....	.....	.....
Round Valley.....	1,900	20	559	.....	.....	20	559	(*)	3	(*)	3	.....	.....
Soboba.....	491	29	413	.....	.....	29	413	.....	.....	.....	.....	.....	.....
Tule River.....	82	32	632	32	632	.....	.....	70	20,665	.....	.....	70	20,665
Colorado.....	57	387	6,535	.....	.....	387	6,535	70	20,665	.....	.....	70	20,665
Southern Ute.....	57	87	3,569	.....	.....	87	3,569	70	20,665	.....	.....	70	20,665
Ute Mountain.....	.....	300	2,966	.....	.....	300	2,966	.....	.....	.....	.....	.....	.....
Idaho: Fort Hall.....	760	213	11,911	.....	.....	213	11,911	.....	.....	.....	.....	.....	.....
Michigan: Mackinac.....	290	.....	.....	.....	.....	.....	.....	1	(*)	.....	.....	1	(*)
Minnesota.....	4,515	1,190	11,262	27	1,057	44	1,119	251	5,139	21	150	217	13
Fond du Lac.....	325	19	825	2	124	.....	701	110	4,732	.....	.....	110	.....
Grand Portage.....	160	59	1,180	.....	.....	37	1,180	40	36	.....	.....	27	13
Leech Lake.....	900	92	1,456	16	375	76	1,081	99	326	19	105	80	221
Nett Lake.....	280	23	544	.....	.....	33	544	2	45	.....	.....	.....	.....
Pipestone.....	100	7	465	.....	.....	7	465	.....	.....	.....	.....	.....	.....
Red Lake.....	750	213	1,143	.....	.....	213	1,143	.....	.....	.....	.....	.....	.....
White Earth.....	2,000	767	5,649	9	558	768	5,091	.....	.....	.....	.....	32	280

	1,621	2,456	56,244	464	9,127	704	1,268	47,117	561	5,809	68	493	5,909
Montana.....													
Blackfeet.....	225	725	26,177	380	8,786	121	214	17,391	180	1,740		180	1,740
Flathead.....	800	104	1,503			8	96	1,503	45	480		45	480
Fort Belknap.....	500	70	2,890			4	66	2,890					
Rocky Boy's Agency	41	222	6,394	59	156	96	67	6,228	56	384	38	18	384
Tongue River.....	255	1,385	19,350	35	185	475	825	19,165	290	3,205	20	250	3,205
Nevada.....	6,451	162	3,088	4	133		158	2,965	121	1,124	105	7	124
Fort McDermitt.....	201	30	396				20	396					
Moapa River.....	55	(*)	84				(*)	84	9	94		6	94
Nevada.....	300	40	1,115				40	1,115				3	
Renno, special agent.	5,060	37	418				37	418	7	30	6	1	30
Walker River.....	495	50	921				50	921					
Western Shoshone.....	840	5	154	4	133		1	21	105	1,000	105		
New Mexico.....	7,311	288	16,144	44	1,448		244	14,696	373	5,077	220	153	1,478
Jicarilla.....	20	165	10,281				121	8,833	138	3,046	55	108	954
Mescalero.....	120	80	5,527	44	1,448		80	5,527	50	524		50	524
Pueblo Bonito.....	2,375	30	77				30	77	15	457	15		
Pueblo Day Schools	4,796	13	293				13	293	150	1,050	150		
North Carolina:													
Cherokee.....	1,500	3	45				3	45					
North Dakota.....	2,085	800	10,288	20	488		780	9,800	89	186		89	186
Fort Totten.....	200	40	50				40	50					
Standing Rock.....	500	518	6,938	20	488		468	6,450					
Turtle Mountain.....	1,335	242	3,300				242	3,300	80	186		80	186
Oregon.....	1,020	95	5,148				95	5,148	6	74		6	74
Klamath.....	480	20	4,212				20	4,212					
Siletz.....	200	38	322				38	322	4	71		4	71
Warm Springs.....	300	37	614				37	614	2	3		2	3
South Dakota.....	4,891	4,991	140,447	159	1,116	2,790	2,042	139,331	548	609	180	57	579
Cheyenne River.....	681	600	27,457				425	27,457					
Crow Creek.....	175	168	9,428	7	110	175	151	9,313	114	212	114		212
Flandreau.....	150	45	1,013				45	1,013	23	178		23	178
Lower Brule.....	125	42	1,889				42	1,889					
Pine Ridge.....	2,120	2,092	55,929	20	40	886	1,136	55,889	411	219	180	34	189
Rosebud.....	2,860	2,005	30,501	130	881	1,675	200	38,670					
Yankton.....	750	49	2,285	2	135	4	43	2,100					

* Not reported.

* Estimated.

* 1918 report.

TABLE 16.—Indians self-supporting and Indians receiving rations and miscellaneous supplies during fiscal year ended June 30, 1919—Continued.

States and reser- vations.	Able- bodied adult Indians self- support- ing.	Indians receiving rations.						Indians receiving miscellaneous supplies.					
		Total.			In return for labor.			Total.			In return for labor.		
		Value of rations.			Number.			Receiving supplies.			Value of supplies.		
		Receiving rations.	Value of rations.	Dis-abled.	Able-bodied.	Without labor equivalent.	Value of rations.	Receiving supplies.	Value of supplies.	Able-bodied.	Without labor equivalent.	Value of supplies.	Dis-abled.
Utah.....	383	540	\$13,550	40	500	\$13,550	687	\$14,456	\$11	.....	.....	\$14,445	687
Goshute.....	202	8	244	8	.....	244	.....	.....	.....	.....	.....	.....	.....
Shirwis.....	75	32	414	32	.....	414	.....	.....	.....	.....	.....	.....	.....
Uintah and Ouray.....	86	500	12,892	.....	500	12,892	686	14,120	11	.....	.....	14,120	686
Washington.....	2,289	33	802	33	.....	802	30	142	12	36	6	106	21
Corville.....	608	8	504	8	.....	504	27	119	12	36	.....	88	15
Cushman.....	173	7	108	7	.....	108	.....	.....	.....	.....	.....	.....	.....
Neah Bay.....	448	2	108	2	.....	108	11	7	.....	6	.....	7	5
Spokane.....	80	9	108	9	.....	108	.....	.....	.....	.....	.....	.....	.....
Taholah.....	535	6	173	6	.....	173	1	16	.....	.....	.....	.....	.....
Yakima.....	200	1	12	1	.....	12	.....	.....	.....	.....	.....	.....	.....
Wisconsin.....	1,283	71	1,780	50	18	1,513	25	113	.....	.....	.....	113	25
Grand Rapids.....	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hayward.....	400	18	267	.....	18	267	26	113	.....	.....	.....	113	26
Isaiah Flambau.....	210	4	603	40	.....	603	.....	.....	.....	.....	.....	.....	.....
La Poudre.....	180	3	267	.....	.....	267	3	544	.....	.....	.....	.....	.....
Red Cliff.....	143	10	844	10	.....	844	.....	.....	.....	.....	.....	.....	.....
Wyoming: Shoshone.....	300	76	4,804	76	.....	4,804	.....	.....	.....	.....	.....	.....	.....

1 Not reported.

2 Unattached Indians not included.

TABLE 17.—Indian and school population, number eligible for school attendance, number in schools, etc., and capacity of schools provided for Indian children during fiscal year ended June 30, 1919.

States and superintend- ancies.	Indian popu- lation.	Num- ber of school age.	Inel- ligible for attend- ance.	Elig- ible for attend- ance.	Indian children enrolled in school.						Capacity all schools.				Total capa- city of all schools.			
					Government.				Mission and private.		Public. Total in school.	Government.		Mission and private.				
					Non- reser- vation board- ing.	Reser- vation board- ing.	Day.	Total.	Board- ing.	Day.		Reser- vation board- ing.	Day.					
Grand total	307,174	90,219	5,297	84,922	10,853	9,640	5,813	26,325	4,883	660	29,021	18,400	7,396	5,883	1,174	29,021	61,899	
Arizona	42,346	13,342	919	12,423	1,159	1,702	1,551	4,472	774	293	42	6,842	2,221	1,677	575	285	42	4,780
Camp Verde	436	128	2	126	37	.....	64	101	.....	.....	.....	25	.....	60	.....	.....	.....	60
Colorado River	1,141	370	9	361	211	99	310	349	12	80	39	12	80	.....	.....	39	.....	119
Fort Apache	2,466	674	4	670	36	255	107	308	58	.....	.....	189	300	132	40	.....	.....	472
Havasupai	176	46	6	40	.....	.....	29	29	.....	.....	.....	1	.....	35	.....	.....	.....	35
Kalispel	105	37	7	20	.....	.....	17	17	.....	.....	.....	3	.....	22	.....	.....	.....	22
Leupp	1,441	623	19	604	14	97	111	120	9	.....	.....	42	163	22	.....	.....	.....	163
Mogul	4,000	1,103	57	1,046	91	456	547	549	47	.....	.....	467	374	100	.....	.....	.....	576
Navajo	11,280	4,585	85	4,500	52	516	614	823	48	.....	2	994	766	35	.....	.....	.....	1,076
Pima	6,290	1,582	65	1,517	255	278	280	823	300	24	.....	3,506	218	235	38	.....	.....	384
Salt River	2,515	826	90	735	137	230	367	483	.....	.....	1	1,147	216	158	.....	.....	.....	1,884
San Carlos	2,515	826	91	735	24	263	171	453	35	.....	.....	37	216	25	.....	.....	.....	381
Sells (San Xavier)	4,465	1,520	80	1,440	190	227	417	133	103	.....	.....	796	140	100	.....	.....	.....	620
Truxton Canon	4,427	1,440	24	1,416	21	90	111	111	.....	.....	.....	14	140	100	.....	.....	.....	373
Western Navajo	6,360	1,200	380	820	11	164	46	224	.....	.....	.....	596	338	35	.....	.....	.....	.....
Scattered .....	.....	80	.....	80	80	.....	80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
California	16,215	4,987	378	4,579	959	305	400	1,664	34	.....	2,199	682	345	605	100	2,199	3,249	.....
Bishop	1,518	372	26	346	66	.....	81	147	.....	.....	146	53	.....	140	.....	146	286	.....
Campo .....	.....	64	24	40	.....	.....	18	18	.....	.....	.....	21	.....	30	.....	.....	31	.....
Digger	280	80	10	70	14	.....	14	14	.....	.....	.....	42	.....	.....	.....	.....	28	.....
Fort Bidwell	719	172	11	161	75	.....	75	82	.....	.....	.....	80	.....	.....	.....	.....	6	.....
Fort Yuma	968	294	7	287	69	157	40	284	.....	.....	.....	3	180	80	.....	.....	18	278
Greenville	5,924	1,880	44	1,836	163	.....	163	1,634	.....	.....	.....	202	.....	.....	.....	.....	1,471	.....
Hopai Valley	1,712	514	113	401	77	148	225	341	.....	.....	1,471	202	166	.....	.....	1,471	1,706	.....
Maki	628	140	30	110	12	.....	12	85	21	.....	52	34	.....	100	.....	52	152	.....

1 Public school attendance incomplete.
2 Estimated.
3 Includes 3,000 scattered Indians.

¹ Includes 3,000 scattered Indians.

² Estimated.

³ Public school attendance incomplete.

TABLE 17.—Indian and school population, number eligible for school attendance, number in schools, etc., and capacity of schools provided for Indian children during fiscal year ended June 30, 1919—Continued.

States and superintend- encies.	Indian popu- lation.	Num- ber of school age.	Inel- igible for at- tend- ance.	Elig- ible for at- tend- ance.	Indian children enrolled in school.							Capacity all schools.					Total ca- paci- ty all schools.	
					Government.				Mission and private.		Total in school.	Elig- ible chil- dren not in school.	Government.	Mission and private.				
					Non- reser- vation board- ing.	Reser- vation board- ing.	Day.	Total.	Board- ing.	Day.			Pub- lic.	Board- ing.	Day.	Pub- lic.		
California—Continued.																		
Pala.....	1,064	283	22	261	95		60	155			106	261		98			106	204
Round Valley.....	1,842	463	9	454	76		81	157			163	320		111			163	274
Soboba.....	896	257	50	198	25		40	65	1 13		67	145		60			67	127
Tule River.....	445	130	23	107	16		82	98			98	9		86			86	86
Scattered.....		260		260	260		260					260						
Colorado.....	821	315	54	261	22	55	21	98		25	123	138	50	55		25	130	
Southern Ute.....	341	121	10	111	10	55	21	86		25	111		50	30		25	105	
Ute Mountain.....	480	194	44	150	12		12				12			25			25	
Florida: Seminole.....	573	280		280								280						
Idaho.....	4,066	1,174	255	919	72	176	48	296	141	343	790	129	300	80	210	20	343	953
Coeur d'Alene.....	818	197	30	167	4		40	44	46	52	142	25		60	80		52	192
Fort Hall.....	1,759	411	109	292	23	67	8	98	20	10	198	104	200	20	30		52	340
Fort Lapwai.....	1,489	566	116	450	45		109		75	221	450		100	100	100		221	421
Iowa: Sac and Fox.....	358	167	6	161	22	83	56	161			161		80	70			150	
Kansas.....	1,441	528	57	471	96	91		187		240	427	44	71			240	311	
Kikapoo.....	660	227	7	220	32	45		77		138	210	10	71			138	204	
Potawatomi.....	781	291	50	241	64	46		100		107	207	34				107	107	
Scattered.....		10		10	10			10			10							
Michigan: Mackinac.....	1,095	787	43	744	411			411	183	160	744				352		150	502
Minnesota.....	12,447	3,864	552	3,312	365	703	198	1,266	206	1,200	2,702	610	668	259	200		1,200	2,317

Fond du Lac.....	1,074	400	(*)	4	400	48	40	88	.....	306	384	6	.....	20	.....	306	306
Grand Portage.....	340	98	.....	.....	94	11	11	22	.....	65	87	7	.....	.....	.....	65	86
Leach Lake.....	1,738	498	50	50	408	76	139	215	.....	126	351	57	.....	129	.....	126	136
Little Lake.....	590	198	5	5	188	7	97	80	.....	52	186	2	.....	110	.....	52	7
Pipistone (Birch Cooley).....	407	80	5	5	45	10	25	35	.....	80	42	3	.....	86	.....	80	43
Red Lake.....	1,504	462	14	14	448	49	175	224	74	110	408	40	.....	108	70	110	348
White Earth.....	6,794	2,126	434	27	1,702	167	252	551	132	524	1,207	495	.....	250	143	524	1,047
Scattered.....	.....	27	.....	.....	27	27	.....	27	.....	.....	27	.....	.....	.....	.....	.....	.....
Mississippi Union.....	.....	17	.....	.....	17	5	.....	12	17	.....	17	.....	.....	40	.....	.....	40
Montana.....	12,138	3,598	351	3,227	515	573	249	1,337	558	121	2,610	627	.....	531	302	830	2,427
Blackfeet.....	2,883	889	37	852	108	127	48	283	90	.....	480	372	.....	144	60	145	456
Crow.....	1,707	460	13	447	9	137	.....	146	121	.....	447	.....	.....	147	.....	125	100
Flathead.....	2,452	660	100	590	100	97	35	103	99	.....	503	57	.....	.....	.....	200	513
Fort Belknap.....	1,198	348	28	322	61	97	.....	133	99	.....	301	21	.....	61	40	160	9
Fort Peck.....	2,031	608	40	666	60	125	59	241	54	.....	438	128	.....	120	90	40	143
Rocky Boy's Agency.....	2,451	143	76	67	10	26	26	.....	.....	.....	38	31	.....	25	.....	25	25
Tongue River.....	1,416	335	59	276	20	87	84	191	45	.....	258	18	.....	69	57	60	22
Scattered.....	147	147	.....	147	147	.....	.....	147	.....	.....	147	.....	.....	.....	.....	.....	238
Nebraska.....	2,448	985	73	912	286	.....	.....	286	166	42	654	258	.....	.....	182	25	160
Omaha.....	1,380	501	24	477	135	.....	.....	135	16	.....	253	224	.....	.....	.....	112	112
Winnebago.....	1,068	438	39	389	105	46	.....	105	160	42	355	34	.....	.....	182	25	48
Scattered.....	46	46	.....	46	46	.....	.....	46	.....	.....	46	.....	.....	.....	.....	.....	255
Nevada.....	5,840	2,140	60	2,060	338	.....	293	631	.....	.....	1,231	849	.....	.....	384	.....	600
Fallon.....	405	78	3	75	20	.....	55	75	.....	.....	75	.....	.....	.....	65	.....	65
Fort McDermitt.....	323	85	6	79	25	69	.....	79	.....	.....	74	5	.....	80	.....	5	85
Moapa River.....	111	32	3	29	12	29	.....	29	.....	.....	29	.....	.....	20	.....	20	70
Nevada.....	526	124	23	101	35	66	101	101	.....	.....	101	.....	.....	90	.....	90	63
Walker River.....	800	126	23	103	26	27	53	53	.....	.....	65	48	.....	60	.....	60	69
Western Shoshone.....	195	195	2	193	35	84	.....	119	74	.....	119	74	.....	69	.....	69	69
Reno, special agent.....	1,500	1,500	(*)	1,500	186	.....	.....	186	.....	.....	778	722	.....	.....	.....	503	593
New Mexico.....	20,581	7,414	870	6,544	997	827	1,147	2,941	369	35	3,354	3,100	.....	608	1,080	375	2,228
Jicarilla.....	603	174	31	143	10	67	.....	77	.....	.....	79	64	.....	108	.....	.....	110
Mescalero.....	613	196	13	183	15	126	.....	141	.....	.....	141	42	.....	100	.....	100	100
Pueblo Bando.....	2,275	1,000	200	900	18	193	.....	229	(*)	.....	229	571	.....	180	.....	.....	210
Pueblo Day Schools.....	8,724	2,595	364	2,231	726	954	.....	1,679	389	6	2,083	178	.....	952	34	.....	1,341
San Juan.....	6,560	2,760	* 250	2,500	29	313	.....	1,342	(*)	.....	2,849	2,161	.....	230	.....	7	237
Zuni.....	1,816	570	12	558	41	128	175	344	.....	30	374	184	.....	80	118	30	228
Scattered.....	126	126	.....	126	129	.....	.....	129	.....	.....	129	.....	.....	.....	.....	.....	.....

* 1918 report.
 * Attend St. Augustine Mission, Winnebago Reservation.
 * Does not include scattered Indians in California and Oregon.
 * 55 attend Rahoboth mission boarding, Navajo Ariz.
 * Estimated.
 * 20 attend mission boarding, Navajo, Ariz.

TABLE 17.—Indian and school population, number eligible for school attendance, number in schools, etc., and capacity of schools provided for Indian children during fiscal year ended June 30, 1919—Continued.

States and superintend- encies.	Indian popu- lation.	Num- ber of school age.	Inel- ligible for attend- ance.	Eligi- ble for attend- ance.	Indian children enrolled in school.						Capacity all schools.				Total capaci- ty all schools.			
					Government.			Mission and private.			Eligi- ble chil- dren not in school.	Government.		Mission and private.				
					Non- reser- vation board- ing.	Reser- vation board- ing.	Day.	Total.	Board- ing.	Day.		Reser- vation board- ing.	Day.					
														Public.				
New York: Scattered.....	6,100	267	.....	267	39	.....	.....	39	.....	.....	.....	.....	.....	.....	228	228
North Carolina: Cherokee.....	2,399	780	39	741	9	257	110	376	.....	.....	107	160	150	.....	258	568
North Dakota.....	8,981	2,620	71	2,649	338	780	340	1,458	134	.....	903	625	376	154	354	1,509	
Fort Berthold.....	1,176	341	22	319	81	.....	42	123	72	.....	120	.....	66	88	4	158
Fort Totten.....	979	278	22	256	3	1,253	.....	255	.....	.....	255	323	1	.....	.....	323
Standing Rock.....	3,427	938	11	927	139	321	110	570	62	.....	709	302	150	66	77	965	
Turtle Mountain.....	3,309	1,351	16	1,335	103	207	188	498	.....	.....	771	664	160	.....	273	433
Scattered.....	.....	12	12	12	12	.....	.....	12	.....	.....	12	.....	.....	.....	.....	.....
Oklahoma.....	116,380	30,997	323	30,674	2,663	1,833	17	4,513	738	18,942	24,193	6,481	2,604	65	940	18,942	22,551
Cantonment.....	753	220	13	217	38	93	.....	131	.....	.....	19	150	.....	.....	19	109
Cheyenne and Arapaho.....	1,205	348	40	308	44	208	.....	252	.....	.....	56	150	.....	.....	.....	105
Kiowa.....	4,574	1,534	94	1,440	142	699	.....	841	.....	.....	1,292	148	.....	.....	451	1,064
Osage.....	2,154	796	49	747	17	127	.....	144	21	.....	682	747	.....	75	.....	772
Otoe.....	539	174	5	169	30	77	.....	107	.....	.....	42	149	.....	.....	42	144
Pawnee.....	727	231	13	218	42	102	.....	144	.....	.....	30	100	.....	.....	44	144
Ponca.....	1,072	343	6	337	64	104	.....	168	.....	.....	158	326	11	90	158	248
Sac and Fox.....	678	259	51	208	27	46	.....	73	.....	.....	116	189	19	.....	116	116
Seeger.....	742	249	19	230	44	86	17	147	.....	.....	43	100	40	79	43	137
Seneca.....	1,725	794	33	761	79	425	.....	104	53	.....	591	748	13	110	591	741
Shawnee.....	1,735	626	.....	626	35	128	.....	161	108	.....	266	.....	.....	200	.....	310
Total.....	14,574	5,227	323	4,904	562	1,993	17	2,272	182	2,046	4,500	404	1,627	65	325	2,046	3,963
Five Civilized Tribes.....	107,606	25,033	25,033	1,964	140	2,104	556	16,896	19,556	6,077	1,077	615	16,896	18,588

Cherokee Nation...	41,824	12,687	12,687	424	• 140	504	{ 102 }	8,956	9,520	3,167	160	{ 155 }	8,866	9,110
Chickasaw Nation...	10,966	3,026	3,026	133		133	{ 102 }	1,790	2,316	710	80	{ 155 }	1,790	2,365
Choctaw Nation...	26,828	4,947	4,947	677		677	{ 102 }	3,171	4,011	936	410	{ 155 }	3,171	3,701
Creek Nation...	16,701	4,648	4,648	566		566	{ 102 }	2,862	3,418	1,250	327	{ 155 }	2,862	3,189
Seminole Nation...	8,127	325	325	174		174	{ 102 }	117		34	100	{ 155 }	117	217
Scattered.....		137	137	137		137			137					
Oregon.....	6,807	1,932	1,115	219	221	120	560	77	1,000	1,607	140	212	150	1,675
Klamath.....	1,154	377	53	319	100	39	109		144	313	0	112	90	346
Umatilla.....	1,138	352	35	97		15	15		59	74				69
Warm Springs.....	1,167	167	4	236		82	90	77	224	111		133	160	340
Scattered.....	2,200	923		163	121	29	163		800	923		100	30	130
South Dakota.....	22,491	6,317	530	5,787	985	1,021	807	2,763	997	4,045	1,143	1,020	1,138	3,940
Cheyenne River.....	2,772	853	70	703	105	133		203	459	304	180			381
Crow Creek.....	964	242	7	236	65	• 100		165	11	235	82			198
Flandreau.....	283	74	14	60	19			19	25	44	16			25
Lower Ridge.....	616	153	22	131	• 76			131	6		100			105
Pine Ridge.....	7,218	1,848	11	1,684	181	526	987	12	1,410	274	210	715		1,359
Roebad.....	6,866	1,347	48	1,299	250	263	663	12	1,269		200	863	395	1,182
Sisseton.....	2,304	680	15	665	131	123	18	272	412	253	133	40		1,182
Yankton.....	- 3,079	1,094	190	904	164	93		267	609	296	115	126		313
Scattered.....		46	46	46				46	46					217
Utah.....	1,833	453	38	416	31	106	22	189	80	239	176	07		217
Goshute.....	397	106	7	99					38	61		30		68
Shivwits.....	126	34	2	22		22			42	179	115	67		40
Unish and Ouray...	1,110	823	29	294	31	106	137							109
Washington.....	10,968	3,065	333	2,733	466	264	297	1,027	788	1,950	782	311	260	1,910
Colville.....	2,618	551	49	503	103		96	198	231	485	17			531
Cushman.....	2,148	294	20	274	48		38	86	40	206	69	85	70	195
Neah Bay.....	699	174	17	167	11		81	92	40	132	25	120		160
Spokane.....	617	185	20	166	11		49	60	37	97	68	90		127
Taholah.....	232	202	1	201	33		34	66		66	136	78		76
Tulalip.....	1,321	410	26	384	36	177	212	63	109	321	63	180		359
Yakima.....	2,983	1,062	200	883	89	87	148		331	477	405	131		462
Scattered.....		167	167	167			167							331

1 Includes 16 pupils from off reservation.

2 Enrolled at Port Totten.

3 Enrolled at Shaville.

4 Does not include 146 pupils from Cherokee, Five Tribes.

5 Potawmoot not included.

6 Attend Seneca boarding school.

7 Private school.

8 Includes Choctaw pupils.

9 Does not include 14 from Lower Brule.

10 Includes 14 enrolled at Crow Creek mission school.

11 1918 report.

12 Includes 20 pupils enrolled at St. Francis mission, Roebad.

13 Does not include 20 pupils from Pine Ridge.

TABLE 17.—Indian and school population, number eligible for school attendance, number in schools, etc., and capacity of schools provided for Indian children during fiscal year ended June 30, 1919—Continued.

States and superintend- encies.	Indian Popu- lation.	Num- ber of school age.	Inel- igible for attend- ance.	Elig- ible for attend- ance.	Indian children enrolled in school.						Capacity all schools.				Total capa- city all schools.			
					Government.			Mission and private.		Total in school.	Public.	Government.		Mission and private.				
					Non- reser- vation board- ing.	Reser- vation board- ing.	Total.	Board- ing.	Day.			Reser- vation board- ing.	Day.	Board- ing.		Day.		
Wisconsin.....	9,605	3,288	187	3,101	648	496	1,251	263	189	728	2,431	670	470	206	485	660	728	2,549
Grand Rapids.....	1,233	375	9	366	40	.....	40	.....	.....	180	230	136	.....	.....	.....	.....	190	180
Hayward.....	1,266	436	21	415	160	.....	218	.....	.....	98	316	99	.....	74	.....	.....	98	172
Keshena.....	1,733	596	13	583	82	.....	246	.....	.....	7	562	21	170	80	220	120	7	597
Lac du Flambeau.....	1,754	242	17	225	19	137	156	216	93	69	225	69	180	.....	.....	.....	69	229
Leona.....	350	111	1	110	4	.....	.....	.....	.....	42	84	28	.....	.....	.....	.....	42	42
La Pointe.....	1,082	351	74	277	80	.....	92	25	60	70	247	28	.....	.....	200	490	70	790
Oneida.....	2,630	919	35	884	165	160	325	36	36	165	526	358	140	303	50	50	165	355
Red Cliff.....	527	186	17	169	26	.....	34	22	.....	87	169	72	.....	53	65	.....	87	204
Scattered.....	.....	72	.....	72	72	.....	72	.....	.....	.....	72	.....	.....	.....	72	.....	.....	.....
Wyoming: Shoshone.....	1,712	414	43	371	29	107	18	154	190	24	368	3	135	25	240	.....	24	424
Alaska.....	.....	222	.....	222	222	.....	222	.....	.....	.....	222	.....	.....	.....	.....	.....	.....	.....
Illinois.....	.....	2	.....	2	2	.....	2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
Massachusetts.....	.....	1	.....	1	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Missouri.....	.....	3	.....	3	3	.....	3	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....
Total.....	.....	228	.....	228	228	.....	228	.....	.....	.....	228	.....	7,842	.....	.....	.....	.....	7,842
Capacity of nonreservation schools.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

1 90 attending mission schools.

1 Attend Lac du Flambeau school.

RECAPITULATION.

Indian children of school age.....	90,219
Indian children ineligible for school attendance because of illness, deformity, etc.....	6,287
Total Indian children eligible for school attendance.....	84,932
INDIAN CHILDREN ENROLLED IN SCHOOL.	
Government schools:	
Nonreservation boarding.....	10,852
Reservation boarding.....	9,660
Day.....	5,813
Mission schools:	
Contract boarding.....	1,850
Noncontract—Boarding.....	2,832
Day.....	660
Private schools: Contract boarding.....	5,441
Public schools.....	29,102
Total all classes.....	29,021
Number eligible children not in school.....	60,889
	124,063

¹ The total enrollment of pupils in school is larger than the actual enrollment because it contains the enrollment of pupils of reservations and in hospital—sanatoria who are given some academic instruction and are not included in the eligible for school attendance column in this table.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Grand total.....	32,848	31,868	27,244	20,492	
Arizona.....	5,608	5,377	4,780	3,874	
Camp Verde superintendency..	60	64	54	46	
Camp Verde.....	30	25	22	19	Day.
Clarksdale.....	30	39	32	27	Do.
Colorado River.....	80	99	84	56	Reservation boarding.
Fort Apache superintendency..	472	445	430	339	
Fort Apache.....	300	255	249	189	Do.
Canon.....	42	33	32	29	Day.
Cibecue.....	50	36	34	21	Do.
East Fork.....	40	38	37	31	Do.
Cibecue.....	20	41	41	38	Mission day; Evangelical Lutheran.
East Fork.....	20	42	37	31	Do.
Fort Mohave.....	200	158	148	138	Nonreservation boarding.
Havasupai.....	35	29	27	25	Day.
Kaibab.....	22	17	15	12	Do.
Leupp superintendency.....	163	106	94	69	
Leupp.....	163	97	85	69	Reservation boarding.
Tolchaco.....	20	9	9	9	Mission boarding; Evangelical Lutheran.
Moqui superintendency.....	374	453	426	434	
Chimopovy.....	59	42	41	40	Day.
Hoteville Bicabi.....	72	129	122	117	Do.
Orabi.....	80	67	64	58	Do.
Polacca.....	100	113	127	117	Do.
Second Mesa.....	72	75	72	72	Do.
Navajo superintendency.....	1,076	942	847	654	
Navajo.....	350	314	288	214	Reservation boarding.
Chin Lee.....	166	160	130	94	Do.
Tohatchi.....	259	42	24	19	Do.
Cornfields.....	25	22	20	13	Day.
Luki Chuki.....	60	24	18	10	Do.
Ganado.....	35	48	46	44	Mission day; Presbyterian.
Rehoboth.....	40	87	78	65	Mission boarding; Christian Reformed.
St. Michael's.....	150	245	245	195	Mission boarding; Catholic.
Phoenix.....	700	839	699	523	Nonreservation boarding.
Pima superintendency.....	834	892	788	650	
Pima.....	218	278	221	167	Reservation boarding.
Blackwater.....	39	35	32	23	Day.
Casa Blanca.....	40	46	38	31	Do.
Chiu Chuischu.....	40	22	22	20	Do.
Cocklebur.....	40	18	17	14	Do.
Gila Bend.....	30	29	18	10	Do.
Gila Crossing.....	40	22	22	15	Do.
Maricopa.....	40	49	35	32	Do.
Quajote.....	40	31	23	14	Do.
Santan.....	40	47	35	25	Do.
St. John's.....	235	200	295	289	Mission boarding; Catholic.
St. Ann's (Guadalupe).....	35	24	20	10	Mission day; Catholic.
Salt River superintendency.....	158	95	92	73	
Camp McDowell ¹	40	.....	.....	.....	Day.
Lehi.....	30	32	30	20	Do.
Salt River.....	88	63	62	53	Do.

¹ Not in operation.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Arizona—Continued.					
San Carlos superintendency.....	381	469	397	306	
Bylas.....	40	53	52	44	Day.
Rice Station.....	216	263	216	148	Reservation boarding.
San Carlos.....	100	118	99	89	Day.
Rice.....	25	35	30	25	Mission day; Evangelical Lutheran.
Sells superintendency.....	520	463	399	363	
San Xavier.....	155	122	99	89	Day.
Santa Rosa.....	30	11	9	7	Do.
Sells.....	30	23	15	11	Do.
Tucson.....	35	36	25	16	Do.
Vamori.....	40	35	22	18	Do.
Lourdes.....	30	21	21	21	Mission day; Catholic.
St. Anthony's.....	30	32	28	24	Do.
San Miguel.....	20	21	21	21	Do.
San Salano.....	20	29	29	27	Do.
Tucson.....	130	133	130	129	Mission boarding; Presbyterian.
Truxton Canon.....	140	90	84	60	Reservation boarding.
Western Navajo superintendency.	373	213	196	156	
Western Navajo.....	308	164	154	115	Do.
Marsh Pass ¹	30				Do.
Moencopi.....	35	49	42	41	Day.
California.....	1,938	1,847	1,547	1,099	
Bishop superintendency.....	140	81	68	56	
Bishop.....	60	34	28	22	Do.
Big Pine.....	30	20	17	15	Do.
Independence.....	20	12	10	8	Do.
Pine Creek.....	30	15	13	11	Do.
Campo.....	30	16	14	13	Do.
Fort Bidwell.....	98	82	77	64	Nonreservation boarding.
Fort Yuma superintendency.....	260	197	182	134	
Fort Yuma.....	180	157	147	100	Reservation boarding.
Cocopah.....	40	13	8	8	Day.
Yuma Valley.....	40	27	27	26	Do.
Greenville.....	90	147	116	92	Nonreservation boarding.
Hoopa Valley.....	165	148	100	69	Reservation boarding.
Maki superintendency—St. Bonifacio.....	100	34	34	15	Mission boarding; Catholic.
Pais superintendency.....	98	60	54	42	
Pais.....	30	27	23	19	Day.
Capitan Grande.....	24	7	7	6	Do.
La Jolla.....	30	14	14	9	Do.
Rincon.....	14	12	10	8	Do.
Round Valley superintendency.....	111	81	73	42	
Pinollville.....	25	22	20	9	Do.
Potter Valley.....	16	12	11	7	Do.
Upper Lake.....	30	22	19	13	Do.
Yokala.....	40	25	23	13	Do.
Sherman Institute.....	700	879	733	505	Nonreservation boarding.
Soboba superintendency.....	60	40	34	30	
Mesa Grande.....	30	15	15	15	Day.
Volcan.....	30	25	19	15	Do.

¹ Not in operation.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
California—Continued.					
Tule River superintendency.....	86	82	62	47	Day. Do. Do. Do.
Auberry.....	32	33	22	15	
Burrough.....	24	33	25	19	
Tule River.....	50	16	15	13	
Colorado.....	105	76	57	34	
Southern Ute superintendency..	80	76	57	34	
Southern Ute.....	50	55	37	18	Reservation boarding. Day.
Allen.....	30	21	20	16	
Ute Mountain ¹	25				Do.
Idaho.....	610	375	342	243	
Coeur d'Alene superintendency..	140	86	78	65	
Kalispel.....	30	18	14	12	Do. Do. Mission boarding; Catholic
Kootenai.....	20	22	18	15	
De Smet.....	80	46	46	38	
Fort Hall superintendency.....	270	105	80	50	
Fort Hall.....	200	67	47	24	Reservation boarding. Day. Mission boarding; Episcopal Mission day; Presbyterian.
Skull Valley.....	20	8	8	5	
Good Shepherd.....	30	20	15	12	
Presbyterian Mission.....	20	10	10	9	
Fort Lapwai superintendency...	200	184	184	128	
Sanatorium and school.....	100	109	109	72	Boarding. Mission boarding; Catholic.
St Joseph's.....	100	75	75	56	
Iowa.....	150	139	133	89	
Sac and Fox superintendency...	150	139	133	89	
Sanatorium and school.....	80	83	83	58	Boarding. Day. Do.
Fox.....	40	25	22	14	
Mesquakie.....	30	31	28	17	
Kansas.....	821	1,221	1,002	775	
Haskell.....	750	1,130	916	711	Nonreservation boarding. Reservation boarding.
Kickapoo.....	71	91	86	64	
Michigan.....	702	575	528	449	
Mackinac superintendency.....	352	183	172	160	
Baraga (Holy Name).....	152	69	64	53	Mission boarding and day; Catholic. Mission boarding; Catholic.
Harbor Springs (Holy Childhood).	200	114	108	107	
Mount Pleasant.....	350	392	356	289	Nonreservation boarding.
Minnesota.....	1,329	1,300	1,137	832	
Fond du Lac superintendency...	60	30	27	18	
Nett Lake.....	60	30	27	18	Day. Do.
Grand Portage.....	20	11	10	7	
Leech Lake superintendency...	130	139	120	68	
Cass Lake.....	40	61	54	34	Reservation boarding. Do.
Leech Lake.....	90	78	66	34	
Pipestone superintendency.....	248	218	190	154	
Pipestone.....	212	193	170	139	Nonreservation boarding. Day.
Birch Cooley.....	36	25	20	15	

¹ Not in operation.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Minnesota—Continued.					
Red Lake superintendency.....	238	249	235	168	
Red Lake.....	75	93	84	58	Reservation boarding.
Cross Lake.....	93	82	80	57	Do.
St. Mary's.....	70	74	71	53	Contract Mission boarding; Catholic.
Vermilion Lake.....	110	137	128	99	Reservation boarding.
White Earth superintendency...	523	516	427	318	
White Earth.....	250	252	202	138	Do.
Beaulieu.....	30	33	26	21	Day.
Pine Point.....	53	38	34	26	Do.
Round Lake.....	50	28	20	15	Do.
Twin Lake.....	20	33	30	21	Do.
St. Benedict's.....	130	132	115	97	Contract Mission boarding; Catholic.
Mississippi (Choctaws).....	40	12	9	4	
Union.....	40	13	9	4	Day.
Montana.....	1,833	1,501	1,324	1,040	
Blackfeet superintendency.....	349	265	232	179	
Blackfeet.....	144	127	103	72	Reservation boarding.
Heart Butte.....	30	23	20	15	Day.
Old Agency Day.....	30	25	19	16	Do.
Holy Family.....	145	90	90	76	Mission boarding; Catholic.
Crow superintendency.....	442	338	295	242	
Crow.....	100	87	75	50	Reservation boarding.
Pryor Creek.....	47	50	48	38	Do.
Black Lodge.....	30	27	27	25	Mission day; American Missionary Society.
Lodge Grass.....	50	29	29	26	Mission day; Baptist.
Reno.....	35	27	27	23	Mission day; American Missionary Society.
St. Ann's.....	25	14	12	12	Mission day; Catholic.
San Xavier.....	125	80	55	54	Mission boarding; Catholic.
Wyola.....	30	24	22	14	Mission day; Baptist.
Flathead superintendency: St. Ignatius.....	300	190	190	164	Mission boarding; Catholic.
Fort Belknap superintendency...	251	231	194	154	
Fort Belknap.....	51	97	82	60	Reservation boarding.
Lodge Pole.....	40	35	27	20	Day.
St. Paul's.....	160	99	85	74	Mission boarding; Catholic.
Fort Peck superintendency.....	250	235	213	159	
Fort Peck.....	120	125	117	87	Reservation boarding.
No. 1.....	30	21	17	12	Day.
No. 2.....	30	23	19	12	Do.
No. 3.....	30	12	10	7	Do.
Wolf Point.....	43	54	50	41	Mission boarding and day; Presbyterian.
Rocky Boy's agency.....	25	26	19	17	Day.
Tongue River superintendency...	216	216	181	125	
Tongue River.....	69	87	72	50	Reservation boarding.
Birney.....	47	49	33	26	Day.
Lame Deer.....	40	35	33	21	Do.
St. Labre's.....	60	45	40	28	Contract Mission boarding; Catholic.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Nebraska.....	607	655	550	393	
Genoa.....	400	447	354	233	Nonreservation boarding.
Winnebago superintendency.....	207	208	196	160	
All Saint's.....	25	42	30	25	Mission day; Episcopal.
St. Augustine.....	122	86	86	65	Mission boarding; Catholic.
Winnebago Mission.....	60	80	80	70	Mission boarding; Dutch Reformed.
Nevada.....	720	664	575	487	
Carson.....	336	371	326	287	Nonreservation boarding.
Fallon superintendency.....	65	55	46	36	
Fallon.....	40	37	32	24	Day.
Lovelocks.....	25	18	14	12	Do.
Fort McDermitt.....	80	44	34	27	Do.
Moapa River.....	20	17	14	11	Do.
Nevada superintendency.....	90	66	52	37	
Nevada.....	70	53	41	27	Do.
Wadsworth.....	20	13	11	10	Do.
Walker River.....	60	27	25	22	Do.
Western Shoshone superintendency.....	69	84	78	67	
Western Shoshone No. 1.....	35	33	31	26	Do.
Western Shoshone No. 2.....	34	51	47	41	Do.
New Mexico.....	2,967	3,314	2,960	2,325	
Albuquerque.....	400	435	407	320	Nonreservation boarding.
Jicarilla.....	108	67	59	47	Reservation boarding.
Mescalero.....	100	126	120	81	Do.
Pueblo Bonito superintendency.....	210	211	183	145	
Pueblo Bonito.....	180	193	168	133	Do.
Pinedale.....	30	18	15	12	Day.
Pueblo Day superintendency.....	1,341	1,328	1,201	984	
Albuquerque—					
Acomita.....	32	22	20	18	Do.
Encinal.....	30	20	18	15	Do.
Isleta.....	120	126	118	102	Do.
Laguna.....	34	50	43	37	Do.
McCarty's.....	38	33	28	24	Do.
Mesita.....	38	23	23	18	Do.
Paguate.....	60	75	72	64	Do.
Paraje.....	20	42	35	26	Do.
San Felipe.....	60	50	49	37	Do.
Seama.....	28	35	32	25	Do.
Bernalillo.....	125	104	100	92	Mission boarding; Catholic.
Santa Fe—					
Cochiti.....	28	41	34	30	Day.
Jemez.....	120	90	80	61	Do.
Pleuris.....	24	20	20	18	Do.
San Ildefonso.....	40	14	14	13	Do.
San Juan.....	70	59	51	46	Do.
Santa Clara.....	40	66	53	44	Do.
Santa Domingo.....	50	91	78	56	Do.
Sia.....	30	20	17	13	Do.
Taos.....	70	77	61	49	Do.
Jemez.....	34	5	5	5	Mission day.
St. Catherine's.....	250	265	250	200	Mission boarding; Catholic.
San Juan superintendency.....	230	313	273	215	
San Juan.....	150	211	189	148	Reservation boarding.
Tosilema.....	80	102	84	67	Do.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
New Mexico—Continued.					
Santa Fe.....	350	501	413	294	Nonreservation boarding.
Zuni superintendency.....	228	333	304	249	
Zuni.....	80	128	119	79	Reservation boarding.
Zuni.....	118	175	156	142	Day.
Christian Reformed.....	30	30	29	29	Mission day; Christian Reformed.
North Carolina.....	310	367	324	190	
Cherokee superintendency.....	310	367	324	190	
Cherokee.....	160	257	229	142	Reservation boarding.
Big Cove.....	40	28	25	13	Day.
Birdtown.....	40	39	31	18	Do.
Little Snowbird.....	30	22	20	8	Do.
Snowbird Gap.....	40	21	19	9	Do.
North Dakota.....	1,435	1,590	1,222	851	
Bismarck.....	89	95	94	43	Nonreservation boarding.
Fort Berthold superintendency.....	154	114	106	89	
No. 2.....	25	20	18	11	Day.
No. 3.....	30	22	21	19	Do.
Fort Berthold.....	75	43	40	37	Mission boarding; Catholic.
Congregational.....	13	29	27	22	Mission boarding; Congregational.
Fort Totten.....	323	459	357	258	Reservation boarding.
Standing Rock superintendency.....	518	493	354	252	
Standing Rock.....	202	263	164	125	Do.
Martin Kenel.....	100	88	82	26	Do.
Bullhead.....	40	30	18	18	Day.
Cannon Ball.....	40	38	30	16	Do.
Grand River.....	30	19	17	13	Do.
Little Oak Creek.....	40	23	18	10	Do.
St. Elizabeth's.....	50	57	50	44	Mission boarding; Episcopal.
Standing Rock Mission.....	16	5	5	5	Mission boarding.
Turtle Mountain superintendency.....	160	188	146	80	
No. 1.....	40	25	21	13	Day.
No. 2.....	30	33	30	16	Do.
No. 3.....	30	59	41	20	Do.
No. 4.....	30	51	37	22	Do.
No. 5.....	30	20	17	9	Do.
Wahpeton.....	200	241	165	129	Nonreservation boarding.
Oklahoma.....	4,109	4,610	3,830	2,689	
Cantonment.....	90	93	82	58	Reservation boarding.
Cheyenne and Arapaho.....	150	208	197	140	Do.
Chillico.....	500	673	528	363	Nonreservation boarding.
Kiowa superintendency.....	613	609	623	446	
Anadarko.....	110	155	143	95	Reservation boarding
Fort Sill.....	160	166	154	117	Do.
Rainy Mountain.....	155	193	163	110	Do.
Riverside.....	188	185	163	124	Do.
Osage superintendency.....	190	148	113	50	
Osage.....	115	127	98	41	Do.
St. Louis's.....	75	21	15	9	Contract Mission boarding; Catholic.
Otoe.....	80	77	69	51	Reservation boarding.
Pawnee.....	100	102	91	64	Do.
Ponca.....	90	104	91	59	Do.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Oklahoma—Continued.					
Seger superintendency.....	144	103	94	72	
Seger.....	79	86	78	59	Reservation boarding. Day.
Red Moon.....	65	17	16	13	
Seneca superintendency.....	150	218	201	154	
Seneca.....	100	165	156	117	Reservation boarding. Contract Mission boarding; Catholic.
St. Mary's.....	50	53	45	37	
Shawnee superintendency.....	310	280	223	161	
Shawnee.....	110	172	137	80	Reservation boarding. Mission boarding; Catholic. Do.
Sacred Heart (St. Benedict's).....	100	50	34	30	
Sacred Heart (St. Mary's).....	100	58	52	51	
Total Western Oklahoma.....	2,417	2,705	2,312	1,618	
Five Civilized Tribes.....	1,692	1,905	1,518	1,071	
Cherokee Nation; Cherokee Orphan School.....	160	156	129	83	Tribal boarding.
Creek Nation.....	327	400	343	212	
Euchee.....	100	159	122	66	Do. Do. Do.
Eufaula.....	112	131	117	79	
Nuyaka.....	115	110	104	67	
Chickasaw Nation.....	115	134	111	70	
Bloomfield.....	80	90	79	42	Do. Contract; State institution.
El Meta Bond College.....	35	44	32	28	
Choctaw Nation.....	530	715	539	374	
Armstrong Male Academy.....	100	140	90	50	Tribal boarding.
Jones Male Academy.....	100	143	106	68	Do. Do. Do.
Tuskahoma Academy.....	110	137	112	72	
Wheelock Academy.....	100	132	100	60	
Old Goodland.....	80	99	82	78	Contract Mission boarding; Presbyterian. Contract Mission boarding; Catholic.
St. Agnes Mission.....	40	64	49	46	
Chickasaw and Choctaw Nation.....	480	349	285	267	
Murray School of Agriculture.....	150	58	50	48	Contract; State institution.
Oklahoma Presbyterian College.....	50	52	45	40	Contract Mission boarding; Presbyterian. Contract Mission; boarding; Catholic.
St. Agnes Academy.....	160	147	111	102	
St. Elizabeth's.....	70	67	59	58	Do. Do.
St. Joseph's.....	30	25	20	19	
Seminole Nation; Mekusukey.....	100	151	111	65	Tribal boarding.
Oregon.....	1,265	1,241	994	803	
Klamath superintendency.....	202	139	100	83	
Klamath.....	112	100	70	63	Reservation boarding. Day. Do. Do.
Modoc Point.....	30	19	13	7	
No. 2.....	30	5	4	3	
No. 3.....	30	15	13	10	
Salem.....	650	823	663	563	Nonreservation boarding.
Umatilla superintendency.....	283	129	109	91	
Umatilla.....	93	23	21	17	Day. Do. Mission boarding; Catholic.
Tutulla.....	40	29	23	15	
St. Andrew's (Kate Drexel).....	150	77	65	59	

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TABLE 18.—Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Oregon—Continued.					
Warm Springs superintendency	130	150	122	66	
Warm Springs.....	100	121	103	52	Reservation boarding. Day.
Sinnasho.....	30	29	19	14	
South Dakota.....	3,663	3,682	3,062	2,151	
Cheyenne River.....	180	153	102	71	Reservation boarding.
Crow Creek superintendency	157	173	149	102	
Crow Creek.....	82	114	97	60	Do. Contract mission boarding; Catholic.
Immaculate Conception.....	75	59	52	42	
Flandreau.....	360	391	329	238	Nonreservation boarding.
Hope (formerly Springfield).....	60	78	66	48	Do.
Lower Brule.....	100	61	43	37	Reservation boarding.
Pierre.....	250	263	196	134	Nonreservation boarding.
Pine Ridge superintendency.....	1,165	1,015	871	558	
Pine Ridge.....	210	250	236	149	Reservation boarding.
No. 1.....	25	23	20	13	Day.
No. 4.....	30	19	15	9	Do.
No. 5.....	30	42	35	20	Do.
No. 6.....	30	23	22	12	Do.
No. 7.....	33	23	17	9	Do.
No. 9.....	30	29	27	14	Do.
No. 10.....	33	19	18	12	Do.
No. 12.....	30	13	12	6	Do.
No. 13.....	24	14	13	6	Do.
No. 15.....	24	19	16	10	Do.
No. 16.....	36	35	29	10	Do.
No. 17.....	30	27	24	13	Do.
No. 18.....	33	21	19	11	Do.
No. 19.....	30	25	23	12	Do.
No. 20.....	24	18	16	10	Do.
No. 21.....	30	18	16	8	Do.
No. 22.....	27	16	14	5	Do.
No. 23.....	30	17	9	4	Do.
No. 24.....	33	25	20	10	Do.
No. 25.....	30	17	13	6	Do.
No. 26.....	30	23	19	10	Do.
No. 27.....	20	17	16	10	Do.
No. 28.....	23	16	15	8	Do.
No. 29.....	30	13	12	7	Do.
No. 30.....	20	14	14	8	Do.
Holy Rosary.....	240	239	181	166	Contract Mission boarding; Catholic.
Rapid City.....	300	237	213	151	Nonreservation boarding.
Rosebud superintendency.....	978	942	806	595	
Rosebud.....	200	227	210	147	Reservation boarding.
Blackpipe.....	20	17	17	13	Day.
Corn Creek.....	40	16	13	9	Do.
Cut Meat.....	24	17	14	10	Do.
He-Dog's Camp.....	27	19	14	10	Do.
Ironwood.....	24	12	10	8	Do.
Little Crow's Camp.....	26	21	21	15	Do.
Milk's Camp.....	29	21	18	12	Do.
Oak Creek.....	26	22	17	12	Do.
Pine Creek.....	25	20	16	11	Do.
Rosebud.....	25	19	14	10	Do.
Spring Creek.....	26	12	12	10	Do.
Upper Cut Meat.....	21	19	16	11	Do.
Whirlwind Soldier.....	26	24	20	14	Do.
White Lake.....	19	13	10	8	Do.
Wood.....	25	11	11	10	Do.
St. Mary's.....	70	56	53	50	Mission boarding; Episcopal.
St. Francis's.....	325	306	320	235	Contract Mission boarding; Catholic.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
South Dakota—Continued.					
Sisseton superintendency.....	173	141	80	62	
Sisseton.....	123	123	76	51	Reservation boarding.
Do.....	40	18	13	11	Day.
Yankton superintendency.....	240	228	198	155	
Yankton.....	115	93	83	56	Reservation boarding.
Santee Normal Training.....	125	135	115	99	Mission boarding and day; Congregational.
Utah.....	137	128	106	69	
Goshute ¹	30				Day.
Shivwits.....	40	22	18	15	Do.
Uintah.....	67	106	88	54	Reservation boarding.
Washington.....	1,472	1,224	1,007	716	
Colville superintendency.....	200	151	125	100	
No. 1.....	25	11	9	6	Day.
No. 3.....	30	45	28	22	Do.
No. 4.....	30	27	20	14	Do.
No. 9.....	25	12	12	10	Do.
Sacred Heart.....	90	24	24	22	Mission boarding; Catholic.
St. Mary's.....	100	32	32	26	Do.
Cushman superintendency.....	505	645	518	347	
Cushman.....	350	328	413	251	Nonreservation boarding.
Ohehalls.....	30	20	17	12	Day.
Jamestown.....	30	18	16	14	Do.
Port Gamble ¹	25				Do.
St. George.....	70	79	72	70	Mission boarding; Catholic.
Neah Bay superintendency.....	120	81	69	50	
Neah Bay.....	60	49	40	25	Day.
Quileute.....	60	32	29	25	Do.
Spokane superintendency.....	90	49	39	24	
No. 1.....	33	17	14	13	Do.
No. 2.....	32	19	16	14	Do.
No. 8.....	25	13	9	7	Do.
Taholah superintendency.....	76	34	27	23	
Taholah.....	36	34	27	23	Do.
Queets River ¹	40				Do.
Tulalip superintendency.....	250	177	168	132	
Tulalip.....	180	177	168	132	Reservation boarding.
Lummi ¹	40				Day.
Swinomish ¹	30				Do.
Yakima.....	131	87	61	39	Reservation boarding.
Wisconsin.....	2,327	1,655	1,472	1,158	
Hayward superintendency.....	305	336	280	204	
Hayward.....	231	278	228	161	Nonreservation boarding.
La Courte Oreille.....	74	58	52	43	Day.
Keshena superintendency.....	560	473	441	351	
Keshena.....	170	149	135	76	Reservation boarding.
Neopit.....	80	15	14	11	Day.
St. Joseph's.....	220	216	203	167	Contract mission boarding; Catholic.
St. Anthony's.....	120	93	89	77	Mission day; Catholic.

¹ Not in operation.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1919—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Wisconsin—Continued.					
Lac du Flambeau.....	160	187	146	137	Reservation boarding.
La Pointe superintendency.....	690	85	85	75	
Odanah Mission.....	490	60	60	50	Mission day; Catholic.
St. Mary's Mission.....	200	25	25	25	Mission boarding; Catholic.
Oneida superintendency.....	190	186	188	116	
Onida.....	140	160	152	81	Reservation boarding.
Adventist Mission.....	25	18	18	17	Mission day; Adventist.
Hobart Mission.....	25	18	18	18	Mission day; Episcopal.
Red Cliff superintendency.....	117	56	52	44	
Red Cliff.....	52	34	30	22	Day.
Bayfield (Holy Family).....	65	22	22	22	Mission boarding; Catholic.
Tomah.....	275	322	280	231	Nonreservation boarding.
Wyoming.....	400	315	283	221	
Shoshone superintendency.....	400	315	283	221	
Shoshone.....	135	167	86	61	Reservation boarding.
Arapaho.....	25	18	18	11	Day.
St. Stephen's.....	120	106	101	77	Contract mission boarding; Catholic.
Shoshone Mission.....	20	20	19	16	Mission boarding; Episcopal.
St. Michael's.....	100	64	62	56	Contract mission boarding; Protestant Episcopal.

TABLE 19.—*School statistics for 43 years.¹*

INDIAN SCHOOLS AND AVERAGE ATTENDANCE FROM 1877 TO 1919.

Year.	Boarding schools.		Day schools. ²		Total.	
	Number.	Average attendance.	Number.	Average attendance.	Number.	Average attendance.
1877.....	48	.....	102	.....	150	3,508
1878.....	49	.....	119	.....	168	4,142
1879.....	52	.....	107	.....	159	4,446
1880.....	60	.....	109	.....	169	4,651
1885.....	114	6,201	86	1,942	200	8,143
1890.....	149	9,865	106	2,367	246	12,232
1895.....	157	15,061	125	3,127	282	18,188
1900.....	153	17,706	154	3,860	307	21,568
1905.....	167	21,812	145	3,643	312	25,455
1910.....	158	20,106	227	4,889	385	24,945
1911.....	156	18,774	227	4,673	383	23,647
1912.....	170	26,973	242	5,368	412	26,281
1913.....	168	20,607	280	5,223	398	25,830
1914.....	166	20,858	233	5,260	399	26,127
1915.....	160	20,702	228	5,426	388	26,128
1916.....	162	20,683	238	5,220	400	25,303
1917.....	160	20,868	284	4,925	394	25,294
1918.....	161	19,395	223	4,427	384	23,822
1919.....	157	16,109	216	4,383	373	20,492

¹ For other years, see 1913 report.² Indian children in public schools under contract are included in the average attendance, but the schools are not included in the number of schools.³ Includes Five Tribes' boarding schools.⁴ The decrease in attendance is due to a different method of computation. Formerly the average attendance was the average of three-quarters having the greatest attendance. Attendance has been computed on a basis of 10 months, including September, when the attendance is always small.⁵ Attendance has been computed on a basis of 305 days.

TABLE 19.—*School statistics for 43 years—Continued.*

APPROPRIATIONS MADE FOR SCHOOLS BY THE GOVERNMENT SINCE 1876.

Year.	Appropriation.	Per cent increase.	Year.	Appropriation.	Per cent increase.
1877.....	\$20,000	.....	1900.....	\$2,936,080	11.28
1878.....	30,000	50.00	1901.....	3,080,367	4.91
1879.....	60,000	100.00	1902.....	3,244,250	5.32
1880.....	75,000	25.00	1903.....	3,531,250	8.84
1881.....	75,000	.....	1904.....	3,522,950	1.23
1882.....	135,000	80.00	1905.....	3,880,740	10.15
1883.....	487,200	260.00	1906.....	3,777,100	2.67
1884.....	675,200	38.00	1907.....	3,925,830	3.93
1885.....	982,800	47.00	1908.....	4,105,715	4.58
1886.....	1,100,065	10.00	1909.....	4,008,825	2.36
1887.....	1,211,415	10.00	1910.....	3,757,909	6.26
1888.....	1,179,916	2.40	1911.....	3,685,290	1.93
1889.....	1,348,015	14.00	1912.....	3,757,495	1.96
1890.....	1,364,568	1.00	1913.....	4,015,720	6.87
1891.....	1,842,770	35.00	1914.....	4,403,355	9.65
1892.....	2,291,650	24.30	1915.....	4,678,627	6.25
1893.....	2,315,612	1.04	1916.....	4,391,155	6.14
1894.....	2,243,977	3.50	1917.....	4,701,903	7.08
1895.....	2,060,695	8.87	1918.....	5,185,290	10.28
1896.....	2,056,515	2.00	1919.....	4,835,300	6.75
1897.....	2,517,265	22.45	1920.....	4,922,325	1.18
1898.....	2,631,771	4.54			
1899.....	2,638,390	.25			
			Total since 1876.....	113,699,820	.....

¹ Decrease.² Includes \$400,000 for Indian school and agency buildings.³ Includes \$440,000 for Indian school and agency buildings.⁴ Includes \$430,000 for Indian school and agency buildings.⁵ Includes \$300,000 for Indian school buildings, Sioux Reservations, North and South Dakota.⁶ Includes \$350,000 for Indian school and agency buildings.⁷ Includes \$335,000 for Indian school and agency buildings.TABLE 20.—*Demonstration farms, fiscal year ended June 30, 1919.*

States and superintendencies.	Acreage.	Value.	Value of tools and implements.	Employees engaged.		Value of products.			
				Number.	Wages.	Raised.	Consumed.	Sold.	On hand.
Grand total.....	1,435	\$54,456	\$3,587	32	\$5,291	\$2,454	\$514	.....	\$1,940
Arizona.....	90	450	252	6	91	33	33	.....	.....
Kaibab.....	90	450	252	6	91	33	33	.....	.....
Pima ¹.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
California: Campo.....	3	120	.....	.....	.....	281	281	.....	.....
Idaho: Fort Hall ²	200	3,270	.....	.....	.....	.....	.....	.....	.....
Montana: Blackfeet ³	48	1,200	25	.....	.....	.....	.....	.....	.....
North Dakota: Fort Berthold.....	638	7,656	875	14	3,800	1,940	.....	.....	1,940
Oklahoma: Cheyenne and Arapaho ⁴	410	41,000	.....	.....	.....	.....	.....	.....	.....
Oregon: Klamath.....	40	400	2,435	2	1,200	200	200	.....	.....
Utah: Shivwits.....	6	360	.....	10	200	.....	.....	.....	.....

¹ See next table.² Only items reported.TABLE 21.—*Experimentation farms, fiscal year ended June 30, 1919.*

States and superintendencies.	Acreage.	Value.	Value of tools and implements.	Employees engaged.		Value of products.			
				Number.	Wages.	Raised.	Consumed.	Sold.	On hand.
Grand total.....	67	\$7,075	\$824	9	\$3,600	\$5,243	\$435	\$4,608	\$200
Arizona: Pima.....	55	5,500	824	9	3,600	5,243	435	4,608	200
Montana: Crow ¹	1	50	.....	.....	.....	.....	.....	.....	.....
New Mexico: San Juan ¹	10	1,500	.....	.....	.....	.....	.....	.....	.....
North Dakota: Standing Rock ¹	1	25	.....	.....	.....	.....	.....	.....	.....
Wyoming: Shoshone ².....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Only items reported.² Not reported.

TABLE 22.—*Suppression of liquor traffic among Indians, fiscal year ended June 30, 1919.*

States.	Paid deputies employed.	Cases pending July 1, 1918.	New cases fiscal year 1919.	Total cases, 1919.	Disposition of cases.					Fined and imprisoned.					Seizure of liquors (gallons).				
					Convictions.	Dismissals.	Acquittals.	Died, escaped, or bonds forfeited.	Total cases disposed of.	Cases pending June 30, 1919.	Num. ber.	Fines.	Term (mos.).	Whisky.	Alcohol.	Malt.	Wine.	Miscellaneous.	Total.
Total, 1919.	60	3,657	1,516	5,173	985	1,015	69	166	2,135	3,038	985	\$125,329	2,017	10,272	172	7,614	14,522	1,344	33,924
1918.	51	3,079	2,100	5,179	993	1,451	48	30	1,523	3,657	993	120,007	2,774	8,655	343	12,709	13,283	1,564	36,564
1917.	46	2,369	2,371	4,740	956	568	86	51	1,661	3,079	956	94,643	3,163	5,086	492	7,571	3,486	1,977	18,632
1916.	29	2,159	1,619	3,778	906	410	64	29	1,409	2,369	906	88,762	2,603	5,907	511	15,558	3,956	1,223	21,539
1915.	38	1,621	2,187	3,808	1,237	317	73	22	1,649	2,159	1,196	105,067	3,602	2,468	166	14,419	687	2,223	21,122
1914.	58	1,365	3,070	4,435	1,894	449	94	22	1,449	1,621	1,893	103,304	3,629	6,207	480	14,419	257	9,584	30,947
1913.	67	1,004	1,705	2,058	1,884	114	17	9	693	1,365	1,365	50,201	3,629	6,207	472	17,181	826	6,584	26,180
1912.	184	1,002	2,296	3,298	1,002	267	32	21	1,322	1,004	923	87,627	3,005	6,537	513	23,314	477	621	31,462
1911.	143	1,168	1,480	2,648	1,168	265	34	3	1,547	1,004	923	87,627	3,005	6,537	513	23,314	477	621	31,462
1910.	7	97	463	563	1,168	18	13	3	118	345	685	\$80,463	3,260	18,495	1,470	7,773	2,506	5,300	35,544
Arizona.	1	67	15	82	20	12	1	1	32	50	20	1,125	27	49	1	2	145	96	145
Arkansas.	1	30	26	56	19	14	2	1	19	37	19	265	5	75	1	2	77	254	77
California.	3	45	74	119	69	14	2	1	86	33	60	3,840	125	154	1	27	73	8	131
Colorado.	2	9	14	23	3	1	1	1	4	19	3	410	1	123	1	1	1	1	1
Florida.	2	4	4	4	6	12	1	1	19	90	5	950	37	3	1	1	1	1	1
Idaho.	2	84	25	109	5	9	1	1	21	26	29	2,950	50	30	6	98	30	30	30
Iowa.	3	37	30	67	29	9	8	1	41	26	29	1,125	9	39	1	1	1	1	1
Kansas.	9	26	9	35	11	11	1	1	21	14	11	1,125	361	39	31	590	10,234	270	143
Minnesota.	11	430	343	773	135	277	12	12	386	387	135	18,900	3	1,197	8	2	2	11	12,322
Missouri.	2	43	3	46	3	2	2	2	5	41	25	25	3	2,714	1	2	2	74	737
Montana.	2	233	110	343	48	22	11	7	88	255	48	4,704	102	36	1	72	50	36	74
Nebraska.	144	158	41	158	41	65	22	2	108	50	41	3,750	76	36	1	1	1	1	90
Nevada.	53	46	99	141	41	21	7	4	74	26	41	4,200	113	90	1	1	1	1	1
New Mexico.	2	172	48	220	58	76	5	7	146	74	58	6,225	178	90	1	1	1	1	1
New York.	38	38	3	38	3	17	2	2	22	16	3	300	6	1	1	1	1	1	1
North Carolina.	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
North Dakota.	27	29	2	29	3	13	3	1	20	9	3	135	2	1	1	1	1	1	1
Oklahoma.	23	1,539	521	2,060	326	337	19	18	700	1,360	326	57,935	578	5,433	123	6,823	4,210	849	17,438
Oregon.	3	28	72	100	52	5	2	2	59	41	52	5,890	33	139	1	1	3	1	1
Pennsylvania.	1	64	5	69	3	36	2	2	50	19	12	1,635	33	54	2	1	1	110	166
South Dakota.	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Tennessee.	1	26	68	94	36	19	1	3	58	36	36	3,165	151	98	1	1	1	98	98
Texas.	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Utah.	1	26	68	94	36	19	1	3	58	36	36	3,165	151	98	1	1	1	98	98
Washington.	4	40	33	73	33	3	2	1	39	34	33	4,000	26	5	2	1	1	1	7
Wisconsin.	1	486	51	537	29	100	7	5	134	403	29	2,900	74	29	1	1	1	29	29
Wyoming.	13	13	7	20	9	7	1	1	16	4	9	800	28	1	1	1	1	1	1

* Includes 28 deaths and 14 escape.

* Includes fined but not sentenced, penitentiary sentences, and miscellaneous.

* Includes 75 suspended.

* Cases prosecuted.

Iowa: Sac and Fox.....				500	75	15,000						264	2,160		
Michigan: Mackinac.....	14,677	19,468	48,671											8,274	22,281
Minnesota.....	124,983	27,750	206,750	124,917	79,972	800,316	2		3	7,800	2,567	270,664	1,474	2,393	351,681
Fond du Lac.....	6,000	1,000	5,000	16,000	1,000	7,000									218
Grand Portage.....	25,000	5,000	35,000												4,115
Leavenworth.....	60,000	6,700	23,750												1,532
Nett Lake.....	1,866	14,000	126,000	107,677	76,872	768,716	2	(1)	1	1,800			341	496	15,566
Red Lake.....									1	1,000					10,725
Vermillion Lake ¹				840	2,000	24,000			1	6,000	2,410	268,608	527	329	324,515
White Earth.....	2,000	2,000	12,000	400	100	24,000					137	2,066	606	1,668	86
Montana.....	22,000	252,000	627,000	357,070	2,325,800	5,766,800	13	82,000	4	10,750	770	3,196	2,341	19,137	53,683
Blackfeet.....				44,270	* 345,000	690,000					208	417	705	11,860	
Crow.....	2,000	2,000	2,000	10,800	24,800	24,800	2	2,000							100
Flathead.....	20,000	250,000	625,000	200,000	1,380,000	4,140,000	16	80,000	1	4,750	314	946	696	832	53,853
Fort Belknap.....				32,000	96,000	192,000			2	3,000					184,439
Tongue River.....				70,000	480,000	720,000			1	3,000	248	1,784	1,040	6,435	
Nevada: Nevada ¹				2,000	3,000	30,000							25	250	
New Mexico.....	254,327	328,615	1,150,152	594,113	1,599,883	4,675,220	1	37,922	5	6,425	238	714	4,557	4,013	36,539
Navajo.....															100,848
Navaho.....															
Nez Percé.....	254,327	* 328,615	1,150,152	205,253	10,000	15,000	1	37,922	1	1,775	208	624	10	28	36,385
Pueblo Day Schools.....				350,000	1,500,000	4,500,000			2	2,000					109,651
Pueblo Day Schools.....				26,380	32,382	73,720									
San Juan.....				12,000	50,000	64,000			1	2,600	30	90	4,547	4,585	154
Zuni.....				1,500	7,500	22,500			1	150					
North Carolina: Cherokee.....				87,000	35,000	192,000			1	4,000	1,629	2,771			
Oklahoma: Otoe.....	3,000	9,000	72,000												
Oregon.....	65,584	799,480	1,943,100	1,127,508	12,660,650	27,853,800	9	130,000	5	23,000	1,330	3,553	1,427	1,725	62,756
Klamath.....	58,699	751,280	1,878,200	772,000	8,935,000	22,387,500	4	125,000	3	14,000	1,330	3,553	950	475	62,756
Siletz.....	700	19,000	3,188	195,000	195,000	195,000	5	5,000							215,254
Umatilla.....	4,200	8,400	2,320	21,300	10,650	21,300									
Warm Springs.....	5,485	25,000	37,500	350,000	3,500,000	5,250,000			2	9,000			477	1,250	
South Dakota.....	26,800	13,000	59,000	37,336	20,000	100,000	2	1,000	1	2,300	42	252	2,853	33,855	
Lower Brule.....	1,800	3,000	9,000												
Pine Ridge ¹	25,000	10,000	50,000	37,336	20,000	100,000	2	1,000	1	2,300	42	252	312	2,145	

* Tribal timber.
† 1918 report.

* Unknown.
* Includes ties and posts.

* On this reservation.

* School reserve.

* On public domain.

TABLE 23.—Estimated area, stand, and value of timber, sawmills, and quantity and value of timber cut on reservations, fiscal year ended June 30, 1919.—Continued.

States and reservations.	Allotted lands.			Unallotted lands.			Sawmills on reservations.				Timber cut by—			
	Acreage.	Quantity.	Total stumpage value.	Acreage.	Quantity.	Total stumpage value.	Private.		Government.		Government.		Indians.	
							Number.	Cost.	Number.	Cost.	Quantity.	Value.	Quantity.	Value.
Utah.....		<i>M board feet.</i>			<i>M board feet.</i>						<i>M board feet.</i>		<i>M board feet.</i>	Value.
Goshute.....				11,660	18,500	40,875			1	6,000			18	2,524
Utah and Ouray.....				5,000	3,000	6,000								
Washington.....	408,368	2,159,434	3,926,809	6,660	15,500	34,875			1	6,000			1.278	2,524
Colville.....	180,000	400,000	400,000	1,234,328	7,813,065	11,566,590	7	13,000	3	4,500	580	703	38,244	136,349
Cushman.....	6,341	26,000	52,000	620,000	1,002,707	1,002,707	3	(1)	1	2,500	580	703		
Neah Bay.....	6,310	4,000	4,000	20,797	275,000	275,000							1,046	9,432
Spokane.....	40,000	261,720	523,440	75,000	545,250	1,090,500	3	10,400	2	2,000			5	25
Taholah.....	54,558	818,377	1,227,566	168,531	4,213,272	6,319,908							15	130
Tulalip.....	23,479	312,837	1,174,673	350,000	1,776,836	2,878,475	1	2,600			1,338	2,698	442	644
Yakima.....	103,680	336,500	545,130								300	300	32,318	124,855
Wisconsin.....	137,468	49,283	152,097	246,787	1,580,187	6,406,394	1	70,000	1	228,259	20,400	430,400	599	655
Grand Rapids.....	2,000	400	2,800										40,898	185,807
Hayward.....	9,500	22,000	66,000											
Keshena.....	13,021	4,883	29,297	227,424	1,516,214	5,962,538							888	2,563
Lac du Flambeau.....	104,867	2,000	14,000	8,769	60,000	420,000	1	70,000	1	228,259	20,400	430,400	721	1,366
Red Cliff.....	8,000	20,000	40,000										40,020	183,244
Wyoming: Shoshone.....				44,160	334,530	756,038	15	17,400	75	75			1,492	3,241

i Not reported.

* 1917 report.

TABLE 24.—Area on reservations susceptible of irrigation, acreage under projects, and expenditures for irrigation thereon, fiscal year ended June 30, 1919.

States and superintendencies.	Area susceptible of irrigation (acres).				Acreage now under project.			Acreage not under project.	Expenditures—				
	Total.	Allotted.	Un- allotted.	School and agency.	Allotted.	Un- allotted.	School and agency.		During fiscal year 1919.		To June 30, 1919.		
									Construction.	Mainte- nance.	Construction.	Maintenance.	Total.
Grand total.....	1,641,143	1,172,803	444,980	23,380	729,939	217,568	19,564	674,072	\$1,339,327.15	\$591,194.41	\$16,345,420.05	\$2,860,085.16	\$19,235,505.21
Arizona.....	256,300	71,160	182,924	2,216	30,973	8,938	1,054	215,335	116,961.22	111,452.60	2,103,364.55	329,494.77	2,432,859.32
Camp Verde.....	208			208			140	68			750.49	41.52	792.01
Colorado River.....	100,000	11,600	88,330	70	11,600		78	88,330	44,799.67	44,878.51	313,542.62	124,069.95	437,612.57
Fort Apache.....	2,626			301			78	225			17,983.31	963.98	18,347.29
Fort Mojave.....											43,223.86		43,223.86
Havasupai.....	111			3			3				2,218.99		2,218.99
Kalabab.....	74			4			4				5,262.88		5,262.88
Keams Canyon.....											5,567.30		5,567.30
Leupp.....	85			85			25	60			10,407.73		10,407.73
Moqui.....	10						10						
Navajo.....	12,238			238			65	10,173	32,892.67	11,075.87	458,453.76	38,523.58	496,977.34
Papago Reservation and Nomadic Papagos.....													
Prima.....	108,451	48,020	60,000	431	12,300		55	96,006	16,717.44	8,739.56	123,422.75	16,285.98	139,708.73
Salt River.....	13,025	8,040	4,928	69	5,573		44	6,058	2,733.49	217.08	841,929.12	62,957.83	904,887.00
San Carlos.....	2,132			207			207		2,922.47	10,404.49	25,447.77	9,922.42	35,370.19
Sells.....	3,530	3,500		30	1,500		30	2,000	9,524.87	32,125.36	113,305.91	10,489.78	123,895.69
Truxton Canon.....	195			15			10	85			57,198.49	65,045.36	122,143.85
Western Navajo.....	13,565			565			325	12,240	7,668.92		15,207.88		15,592.20
California.....	38,347	19,660	18,324	363	10,847	4,018	344	23,138	26,418.37	8,309.97	754,060.04	134,668.47	888,728.51
Bishop.....	3,361	3,350		11	1,350		9	2,002	1,045.31				
Campo.....	267			7			7						
Digger.....	111	106	6		60		135	46		48.50			
Fort Bidwell.....	5,250						6						
Fort Yuma.....	8,757	8,020	560	100	150		100	5,000					
Hoopa Valley.....	2,790	1,400		177	8,020		177						
Maliki.....	13,091			29	200		16	2,413					
Pala.....	3,628			10			10	12,310	4,653.81	7,246.03			
Round Valley.....		1,634	1,980	14	1,067		11	696	17,536.07	7,349.60			
Soboba.....	932			14			13	446	611.80				
Tule River.....	161			1			1	130	2,567.38	538.67			
				</									

¹ Includes work on all projects except those specifically named.

² Formerly San Xavier.

³ Carried as allotted last year.

¹ Total costs unadjusted for old items prior to 1918 pend-
ing inclusion of all irrigation items since 1887.

² Project abandoned.

TABLE 24.—Area on reservations susceptible of irrigation, acreage under projects, and expenditures for irrigation thereon, fiscal year ended June 30, 1919—Continued.

States and superintendencies.	Area susceptible of irrigation (acres).				Acreage now under project.				Acreage not under project.	Expenditures—			
	Total.	Allotted.	Un- allotted.	School and agency.	Allotted.	Un- allotted.	School and agency.	During fiscal year 1919.			To June 30, 1919.		
								Construction.		Mainte- nance.		Total.	
Colorado.....	18,260	18,000	.....	253	15,000	.....	250	3,000	9,438.35	2,252.49	284,362.27	15,620.80	279,983.07
Fort Lewis Southern Ute, diminished Southern Ute.....	18,260	18,000	.....	250	15,000	.....	250	3,000	.....	.....	214.24	308.45	522.69
Idaho.....	46,435	38,940	6,700	795	38,640	6,700	676	419	9,438.35	2,252.49	242,864.70	10,748.65	253,613.35
Fort Hall.....	45,820	38,540	6,700	580	38,540	6,700	580	419	4,160.04	46,991.83	869,538.32	268,291.49	1,167,829.81
Fort Lapwai.....	615	400	.....	215	100	.....	96	419	4,160.04	40,991.83	863,015.36	238,080.05	1,161,085.41
Lemhi.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,156.83	211.44	4,368.27
Montana.....	557,450	420,641	124,010	12,799	327,064	100,870	12,129	117,357	585,798.98	141,977.62	7,009,557.55	874,472.33	7,883,929.88
Blackfoot.....	111,600	61,316	50,020	164	51,066	29,280	164	31,000	21,218.81	14,386.14	1,044,498.91	37,647.41	1,082,146.32
Crow.....	153,702	153,307	.....	395	70,020	42,125	205	83,477	118,999.53	100,183.58	1,322,505.55	585,452.09	1,908,957.64
Flathead.....	134,600	81,375	42,125	11,000	81,375	42,125	11,000	400	387,361.15	19,836.79	3,551,629.34	104,356.94	3,655,986.28
Fort Belknap.....	26,435	124,643	.....	1,000	124,643	.....	620	400	8,036.14	5,906.11	266,031.62	106,138.94	371,170.76
Fort Peck.....	124,643	124,643	.....	.....	.....	.....	.....	.....	46,183.35	1,662.00	690,696.90	20,267.31	710,964.21
Fort Shaw.....	3,620	.....	.....	220	.....	.....	140	2,480	.....	.....	2,769.31	21,619.64	2,769.31
Tongue River.....	.....	.....	3,400	.....	.....	1,000	.....	.....	.....	1,662.00	130,225.72	.....	151,945.36
Nevada.....	45,363	11,543	33,484	336	4,363	29,474	274	11,252	32,075.08	11,982.28	409,339.26	62,403.89	471,743.15
Carson School. Fallon (Carson sink allotments).....	.....	.....	.....	.....	.....	.....	.....	.....	52.09	.....	6,600.33	.....	6,600.33
Fort McDermitt.....	4,960	3,850	818	32	1,200	18	32	3,430	.....	.....	98,302.03	23,094.68	121,396.71
Moapa River.....	1,703	1,158	530	75	608	.....	39	1,116	.....	.....	5,222.11	407.87	5,629.98
Nevada (Pyramid Lake). Walker River.....	600	.....	.....	.....	600	.....	.....	.....	661.05	955.59	11,266.41	1,478.29	12,743.70
Walker River.....	3,230	.....	3,300	30	.....	620	30	2,680	26,309.01	5,426.17	121,309.39	11,922.32	133,231.71
Western Shoshone.....	6,047	5,955	36	36	1,955	36	30	4,026	4,440.04	5,126.47	120,696.63	20,772.05	141,468.69
	28,945	28,800	143	143	.....	28,800	143	4,026	611.69	476.05	45,922.36	4,728.07	50,652.03

New Mexico.....	49,550	600	48,080	870	475	36,130	760	12,185	27,944.24	14,647.34	1,018,827.22	103,937.13	1,122,764.35
Alvarilla.....	990	600	.....	360	475	.....	260	225	.....	.....	7,749.15	.....	7,749.15
Acaciaro.....	400	.....	360	40	.....	.....	260	100	.....	.....	15,698.32	.....	15,698.32
Pueblo Bonito 1	.....	.....	.....	30	.....	.....	.....	4,800	12,787.43	634.80	180,279.07	2,342.66	182,621.73
Pueblo Day Schools.	26,960	.....	26,960	320	.....	22,660	.....	5,000	10,784.27	8,380.72	262,706.42	62,491.82	325,198.24
San Juan.....	14,140	.....	13,830	320	.....	8,830	320	2,000	4,381.54	3,431.83	337,063.05	39,102.65	376,165.70
Zuni.....	7,120	.....	7,000	120	.....	5,000	120	.....	.....	.....	.....	.....	.....
North Dakota: Standing Rock 1	89,646	88,640	.....	1,006	.....	.....	.....	89,646	.....	.....	.....	.....	.....
Oregon.....	142,213	110,470	30,000	1,743	12,000	30,000	1,743	98,470	1,614.83	4,189.67	271,262.33	15,551.31	286,813.64
Klamath.....	140,000	108,270	30,000	1,730	12,000	30,000	1,730	96,270	1,500.03	4,189.67	264,300.18	15,551.31	279,851.49
Umatilla 1	200	.....	.....	.....	.....	.....	.....	200	.....	.....	397.97	.....	397.97
Warm Springs.....	2,013	2,000	.....	13	.....	.....	13	2,000	114.80	.....	6,564.18	.....	6,564.18
South Dakota.....	7,215	0,800	.....	415	800	.....	340	6,075	.....	1,405.31	71,514.54	2,288.66	73,803.20
Pierre.....	265	.....	.....	265	.....	.....	265	.....	.....	17.31	32,761.77	900.66	33,662.43
Fine Ridge.....	6,950	6,800	.....	150	800	.....	75	6,075	.....	1,388.00	38,463.57	1,388.00	39,851.57
Rosebud.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	286.20	.....	286.20
Utah.....	87,896	85,514	1,438	644	80,094	1,438	644	5,420	6,728.53	112,785.80	886,199.91	422,638.66	1,278,838.57
Goehute.....	330	.....	300	30	.....	300	30	.....	.....	293.38	888.30	1,355.63	2,243.93
Shilwits.....	145	.....	138	7	.....	138	607	5,420	363.19	643.49	1,933.72	1,663.34	3,617.06
Utah and Ouray.....	87,121	85,514	1,000	607	80,094	1,000	607	5,420	6,365.34	111,873.93	833,367.89	419,619.69	1,272,977.58
Washington.....	227,778	227,735	.....	43	165,980	.....	43	61,775	391,235.32	78,557.44	1,531,996.59	412,160.33	1,944,156.92
Colville.....	47,003	46,960	.....	43	41,960	.....	43	5,000	2,376.22	2,788.05	51,974.94	4,988.39	56,963.33
Cushman.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,468.21	.....	1,468.21
Spokane.....	775	775	.....	.....	.....	.....	.....	775	.....	.....	1,528.96	.....	1,528.96
Yakima.....	180,000	180,000	.....	.....	124,000	.....	.....	56,000	388,896.10	75,789.39	1,477,023.48	407,170.94	1,884,194.42
Wyoming: Shoshone.....	75,000	73,100	.....	1,900	43,663	.....	1,907	30,000	120,684.76	26,642.06	980,927.11	218,537.32	1,199,484.43
Administration: Special Investigations, etc.	.....	.....	.....	.....	.....	.....	.....	.....	18,247.43	.....	204,640.36	.....	204,640.36

1 Underestimated last year.

2 No living water.

3 1917 report.

4 Water lost through court decree.

TABLE 25.—Miles of ditches and use of irrigated areas on Indian reservations, fiscal year ended June 30, 1919.

States and superintendencies.	Ditches on reservation.		Allotments under ditch June 30, 1919.	Indians benefited by irrigation.	Irrigated lands allotted or leased.	Acreage of irrigated lands cultivated by Indians, whites, and schools.							Within service of ditches June 30, 1919.	Prospective area to be irrigated.	
	Main.	Lateral.				Unallotted.	School and agency.	Total.	Value of crops.	By Indians.		Value of products.			
										Number engaged.	Acreage.				
	Miles.	Miles.	Number.	Number.	Acres.								Acres.	Acres.	
Grand total.....	1,525	3,738	14,176	30,097	176,814	240,419	111,707	2,423	354,549	114,650,102	10,848	140,997	3,320,000	600,827	1,950,405
Arizona.....	266	182	3,385	12,263	5,523	24,538	7,460	679	32,677	877,394	2,814	26,950	724,927	36,378	219,922
Camp Verde.....	2	2		110				140	140	4,900	25	140	4,900	170	38
Colorado River.....	20	26	511	108	3,020	4,355			4,355	207,735	108	1,335	63,681	5,110	94,890
Fort Apache.....	70	20		1,500			1,500	65	1,565	43,965	500	1,335	43,965	2,401	225
Havasupai.....	4	8		176	3		100	3	1,103	3,026	47	100	2,713	111	
Kalabab.....	1			81			70	4	74	844	16	74	844	74	
Leupp.....		3		25				4							60
Moqui.....															
Navajo.....	60			3,000			10		4		(*)	10	(*)	10	
Pima.....	65	40	2,000	5,000	2,500	13,110	2,000	238	2,238	23,500	(*)	2,238	23,500	2,238	10,000
Salt River.....	23	58	804	1,228		5,573			13,110	242,516	1,000	10,610	242,516	13,110	95,341
San Carlos.....	(*)	(*)	(*)	300			1,350	25	6,948	255,490	303	6,948	255,490	7,182	6,043
Sells.....	(*)	(*)	(*)	700		1,500			1,385	22,700	300	1,385	22,700	2,182	
Truxton Canon.....	1			40			45		1,500	39,188	70	1,500	39,188	1,530	2,000
Western Navajo.....	20	25		(*)			1,000	200	45	400	40	45	400	110	85
	117	150	1,137	3,024	5,820	11,204	4,868	58	16,130	884,419	908	10,282	25,000	1,325	12,240
California.....															
Bishop.....	1			500		1,080			16,130	884,419	908	10,282	374,720	17,133	21,214
Campo.....	11	13	150	74			237	18	1,098	35,890	200	1,098	35,890	1,350	
Digger.....	3		19	110		50	5	7	244	17,030	16	244	17,030	2,011	
Fort Bidwell.....	3	2		5					55	4,500	20	55	4,500	111	23
Fort Yuma.....	45	105	802	828	5,820	8,020	100	6	100	2,500	5	100	2,500	200	5,050
Hoopa Valley.....	(*)	(*)	(*)	(*)		1,400	140	8	8,166	172,000	195	2,340	213,000	8,757	
Malki.....	17	16	(*)	571			1,826	16	2,776	32,139	85	2,760	30,547	2,776	13
Pala.....	24	11	166	655		554	1,722	8	1,826	30,820	121	1,826	30,820	1,284	11,265
Soboba.....	5	2		131			418	2	1,284	32,770	188	1,278	32,770	1,284	2,344
Tule River.....	8	1		150			160	1	161	3,000	46	161	3,000	508	
Colorado: Southern Ute.....	45	60	95	250	2,400	4,129			4,129	176,650	80	1,729	33,650	5,385	12,865

	59	131	1,859	275	12,640	19,517	158	341	20,016	452,621	275	7,376	154,373	26,050	20,385
Idaho.....	55	129	1,859	275	12,585	19,267	158	341	19,766	452,621	275	7,181	154,373	26,780	20,040
Fort Hall.....	4	2	(*)	(*)	55	250	.....	.....	250	(*)	(*)	195	(*)	270	345
Fort Lapwai.....	239	1,252	3,607	4,150	23,583	35,402	22,809	165	58,376	1,133,835	712	26,788	394,352	241,240	316,210
Montana.....	85	273	1,150	1,150	7,500	3,484	.....	.....	3,484	46,100	6106	2,578	28,893	47,600	63,900
Blackfeet.....	99	184	1,772	1,600	7,000	15,000	.....	25	15,025	723,355	820	8,025	125,355	72,640	81,632
Crow.....	19	729	685	1,400	8,921	15,619	11,509	.....	27,128	700,182	48	3,608	92,182	91,000	43,500
Flathead.....	28	58	.....	1,000	.....	.....	10,800	.....	10,800	106,625	358	10,800	106,625	18,900	10,685
Fort Belknap.....	.....	.....	.....	.....	162	1,289	.....	140	1,289	24,283	.....	1,137	19,127	10,200	114,443
Fort Peck.....	8	8	.....	.....	.....	.....	500	.....	640	9,200	.....	640	9,200	1,000	2,620
Tongue River.....	63	96	735	1,725	60	3,538	1,418	173	5,128	765,323	996	5,020	131,606	12,687	32,676
Nevada.....	4	21	383	310	.....	1,200	.....	.....	1,230	28,145	67	1,200	27,335	3,860	820
Fallon.....	7	.....	110	110	.....	608	.....	39	647	4,730	70	628	4,480	3,647	1,116
Fort McDermitt.....	6	5	117	.....	.....	350	.....	30	350	10,600	40	350	10,600	350	250
Moapa River.....	9	33	.....	200	.....	.....	312	.....	342	5,747	630	342	5,745	3,330	.....
Nevada.....	200	.....	.....	.....	60	1,380	36	.....	1,416	56,300	99	1,356	55,400	2,500	.....
Walker River.....	12	12	125	504	.....	.....	1,070	74	1,144	28,046	100	1,144	28,046	2,000	3,547
Western Shoshone.....	25	25	.....	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,000	26,943
New Mexico.....	238	257	80	5,200	.....	100	32,310	480	32,880	631,575	4,220	32,880	631,575	42,400	7,150
Jicarilla.....	12	4	80	100	.....	100	.....	.....	100	565	36	100	565	960	.....
Mescalero.....	4	.....	.....	20	.....	.....	260	40	300	7,733	20	300	7,733	300	100
Pueblo Bonito.....	197	200	.....	2,334	.....	.....	22,050	.....	22,050	409,012	2,334	22,050	409,012	26,980	.....
Pueblo Day Schools.....	15	23	.....	980	.....	.....	5,000	320	5,320	130,795	880	5,320	130,795	9,060	5,050
San Juan.....	10	30	.....	1,816	.....	.....	5,000	120	5,120	83,470	900	5,120	83,470	5,120	2,000
Zuni.....	30	43	203	190	700	3,400	.....	300	3,700	64,500	50	3,000	45,000	12,250	129,963
Oregon.....	24	41	200	150	500	3,200	.....	300	3,500	52,500	50	3,000	45,000	12,050	127,950
Klamath.....	6	2	3	40	200	200	.....	.....	200	12,000	(*)	(*)	(*)	200	2,013
Umatilla.....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6,150
Warm Springs.....	11	22	12	36	.....	.....	.....	150	150	5,000	112	.....	.....	800	.....
South Dakota: Pine Ridge.....	163	775	810	667	48,220	37,548	42,676	35	80,259	666,608	315	13,421	121,608	81,176	6,420
Utah.....	6	24	.....	397	.....	.....	300	30	330	9,600	75	330	9,600	330	.....
Goshute.....	3	1	.....	100	.....	.....	50	5	55	2,220	70	55	2,220	145	.....
Shivwits.....	154	750	810	170	48,220	37,548	42,326	.....	79,874	654,788	170	13,036	109,788	80,701	6,420
Uintah and Ouray.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* 1918 report.
 † Estimated.
 ‡ No living water.
 § Not reported.
 ¶ No record.

1 Data incomplete.
 2 Does not include Pierre and Standing Rock, which show an irrigable area of 89,911 acres.

3 Not reported.
 4 Does not include crop value of leased land.

TABLE 26.—Allotments approved by the department during the fiscal year ended June 30, 1919, and made in the field.

States and tribes or reservations.	Approved by department.		Made in the field.	
	Number.	Acreage.	Number.	Acreage.
Total	782	125,615	428	65,992
Arizona	40	4,573	12	1,745
Colorado River.....	9	90		
Public domain.....	31	4,483	12	1,745
California: Public domain	21	1,605	3	360
Minnesota: White Earth	1	100		
Montana	383	65,206		
Crow.....	349	60,914		
Fort Peck.....	3	960		
Public domain.....	31	3,332		
Nevada: Public domain	5	651		
New Mexico: Public domain	222	35,456	76	11,702
North Dakota	3	360	2	480
Standing Rock.....			1	320
Public domain (Turtle Mountain).....	3	360	1	160
Oregon: Klamath	1	160	126	18,239
South Dakota	99	16,544	200	33,466
Cheyenne River.....			169	27,808
Crow Creek.....			40	6,158
Lower Brule.....	1	640		
Rosebud.....	98	15,904		
Utah: Public domain	2	320		
Washington: Colville	3	480		
Wisconsin: La Pointe (Bad River)	2	160		
Total reservations	467	79,408	336	52,026
Total public domain	315	46,207	92	13,967

TABLE 27.—*Sales of Indians' allotted lands during fiscal year ended June 30, 1919.*

States and superintendencies.	Noncompetent sales. ¹			Inherited-land sales. ²		
	Number of tracts.	Acreage.	Proceeds.	Number of tracts.	Acres.	Proceeds.
Grand total.....	5, 120	572, 910. 92	\$9, 942, 571. 14	9, 945	1, 217, 032. 14	\$20, 181, 668. 34
Total, 1919.....	463	57, 947. 00	1, 224, 823. 00	507	57, 450. 00	1, 580, 309. 00
1918.....	662	74, 126. 00	1, 541, 178. 00	438	49, 216. 00	1, 174, 855. 00
1917.....	588	69, 549. 00	1, 040, 202. 00	655	75, 892. 00	1, 546, 965. 00
1916.....	583	54, 958. 62	969, 611. 24	324	35, 762. 25	694, 241. 48
1915.....	422	34, 429. 09	584, 724. 56	393	68, 245. 45	715, 568. 52
1914.....	529	45, 528. 31	779, 526. 14	418	45, 241. 99	773, 309. 16
1913.....	208	20, 778. 80	407, 315. 56	109	10, 797. 84	285, 097. 72
1912.....	324	34, 391. 11	568, 880. 75	392	43, 652. 27	889, 285. 02
1911 ³	494	56, 197. 98	978, 588. 27	638	79, 665. 66	1, 503, 960. 38
1910 ⁴	520	82, 655. 50	1, 245, 639. 96	573	123, 359. 61	1, 950, 315. 92
1909 ⁴	235	34, 060. 33	442, 762. 85	753	102, 708. 00	1, 321, 258. 72
1908.....	92	7, 990. 58	159, 318. 81	768	91, 302. 57	1, 302, 508. 94
1907.....				820	106, 359. 25	1, 248, 793. 34
1906.....				643	64, 447. 67	981, 430. 87
1905.....				978	90, 214. 97	1, 393, 131. 52
1904.....				1, 236	122, 222. 52	2, 057, 464. 50
1903.....				(⁵)	44, 493. 99	757, 173. 25
California: Hoopa Valley.....	1	39	1, 500	1	15	450
Colorado: Southern Ute.....	15	2, 375	10, 262	15	2, 440	12, 244
Idaho.....	10	380	24, 902	31	2, 827	135, 482
Coeur d'Alene.....				4	542	22, 606
Fort Hall.....	2	100	5, 850	1	80	6, 250
Fort Lapwai.....	8	280	19, 052	26	2, 205	106, 626
Kansas.....	13	660	46, 249	6	443	22, 516
Kickapoo.....	10	460	37, 913	6	443	22, 516
Potawatomi.....	3	200	8, 336			
Minnesota.....	9	482	7, 230	7	301	2, 564
Fond du Lac.....	1	40	252			
Leech Lake.....				6	221	1, 844
White Earth.....	8	442	6, 978	1	80	740
Montana.....	28	3, 030	49, 485	54	5, 762	78, 490
Crow.....	10	760	17, 595	46	4, 982	58, 739
Flathead.....	12	870	18, 181	6	460	14, 830
Fort Peck.....	6	1, 400	13, 709	2	320	4, 930
Nebraska.....	43	2, 725	303, 659	66	4, 493	377, 446
Omaha.....	25	1, 549	232, 767	29	1, 974	176, 138
Santee.....	6	576	19, 030	3	345	11, 527
Winnebago.....	12	600	51, 862	34	2, 174	189, 781
North Dakota.....	71	10, 997	111, 116	45	3, 948	64, 031
Fort Berthold.....	1	160	2, 388			
Fort Totten.....	22	1, 357	34, 678	41	2, 900	57, 384
Standing Rock.....	40	8, 440	65, 070	3	968	6, 214
Turtle Mountain.....	8	1, 040	8, 960	1	80	500

¹ Under act of Mar. 1, 1907 (34 Stat. L., 1015-1018), modified by acts of May 29, 1908 (35 Stat. L., 444) June 25, 1910 (36 Stat. L., 855-856), and Feb. 14, 1913 (37 Stat. L., 678-679).

² Under act of May 27, 1902 (32 Stat. L., 245-275), modified by acts of May 8, 1906 (34 Stat. L., 182), May 29 1908 (35 Stat. L., 444), June 25, 1910 (36 Stat. L., 855-856), and Feb. 14, 1913 (37 Stat. L., 678-679).

³ Includes sales of lands of Kaw, Osage, and Five Civilized Tribes.

⁴ Includes sales of Five Civilized Tribes.

⁵ Unknown.

TABLE 27.—*Sales of Indians' allotted lands during fiscal year ended June 30, 1919—*
Continued.

States and superintendencies.	Noncompetent sales.			Inherited-land sales.		
	Number of tracts.	Acreage.	Proceeds.	Number of tracts.	Acres.	Proceeds.
Oklahoma.....	92	10,625	\$261,392	88	10,860	\$320,608
Cantonment.....				3	482	8,404
Cheyenne and Arapaho.....	16	1,842	51,512	17	2,194	65,606
Kiowa.....	10	833	26,931	26	4,188	114,113
Osage.....	10	4,679	49,000			
Otoe.....	23	1,498	42,386	9	964	25,215
Pawnee.....	8	348	10,709	15	1,155	46,447
Ponca.....	13	640	37,349	2	100	5,033
Sac and Fox.....	2	118	3,430	3	245	14,966
Seger.....	2	280	9,975	8	968	34,340
Seneca.....	8	387	30,100	2	84	925
Shawnee.....				4	400	5,530
Oregon.....	5	572	9,396	16	1,798	46,910
Klamath.....	5	572	9,396	10	1,458	14,504
Umatilla.....				6	340	32,406
South Dakota.....	136	24,021	350,515	145	22,064	467,781
Cheyenne River.....	12	3,685	27,828	7	1,585	8,550
Crow Creek.....	6	880	16,374	17	3,113	31,221
Pine Ridge.....	33	8,282	46,381	16	6,287	47,564
Rosebud.....	46	8,727	147,178	20	3,610	61,733
Sisseton.....	15	1,052	41,693	19	2,162	74,516
Yankton.....	24	1,395	71,061	66	5,137	244,187
Utah: Uintah and Ouray.....	16	960	15,481	8	492	10,231
Washington.....	12	487	16,688	17	1,200	28,329
Colville.....	1	80	1,251	9	480	960
Cushman.....	3	43	630			
Spokane.....	1	121	2,400			
Yakima.....	7	243	12,207	8	720	27,369
Wisconsin.....	5	264	11,152			
La Pointe.....	3	242	10,900			
Oneida.....	2	22	952			
Wyoming: Shoshone.....	7	330	5,796	8	607	13,131

TABLE 28.—*Patents in fee issued under act of May 8, 1906 (34 Stat. L., 182), as modified by acts of May 29, 1908 (35 Stat. L., 444), and June 25, 1910 (36 Stat. L., 855).*

States and superintendencies.	Patents in fee issued from May 8, 1906, to June 30, 1919.				Applications for patents in fee during fiscal year ended June 30, 1919.			
	Original allotments.		Inherited land.		Received.	Denied.	Approved.	
	Number.	Acreage.	Number.	Acreage.			Number.	Acreage.
Total	22,137	2,676,678.49	3,019	328,645.45	4,714	346	4,368	553,376
Arizona: San Xavier.....	1	40.00	1	12.40				
California	452	27,340.13	6	308.87	428	1	427	25,790
Bishop.....	2	280.00						
Fort Bidwell.....	1	40.00			1		1	40
Greenville.....	1	80.00						
Hoopa Valley.....	226	15,367.13	5	288.87	210		210	14,342
Round Valley.....	222	11,573.00	1	10.00	217	1	216	11,406
Colorado: Southern Ute..	2	640.00			2		2	640
Idaho	421	54,648.86	69	4,872.18	96	19	77	8,482
Coeur d'Alene.....	184	29,088.97	8	1,267.65	20	6	14	2,154
Fort Hall.....	75	12,484.94			8	2	6	1,081
Fort Lapwai.....	162	13,076.95	61	3,604.53	68	11	57	5,247
Kansas	359	26,483.53	94	7,815.79	84	7	77	5,653
Kickapoo.....	201	12,646.14	52	4,492.30	56	5	51	3,205
Potawatomi.....	158	13,837.39	42	3,323.49	28	2	26	2,448
Michigan: Mackinac and Mount Pleasant.....	33	2,063.28	4	202.24	4		4	160
Minnesota	4,202	340,067.58	47	3,335.15	406	17	388	35,138
Fond du Lac.....	88	6,215.50	7	360.00	51	4	47	3,478
Grand Portage.....	37	2,747.32	7	560.00	18	1	17	1,078
Leech Lake.....	269	24,923.87	24	1,708.65	122	12	110	12,018
Nett Lake.....	42	3,474.89	9	706.50	21		21	1,666
White Earth.....	1,766	302,706.00			193		193	16,866
Montana	2,220	483,290.23	377	48,419.88	859	31	828	191,587
Blackfeet.....	862	269,149.35	2	254.62	424		424	133,271
Crow.....	191	34,649.30	214	26,355.37	89	1	88	15,135
Flathead.....	758	66,988.03	72	5,686.89	246	22	224	19,900
Fort Peck.....	409	112,503.55	89	16,120.00	100	8	92	23,281
Nebraska	1,278	85,168.30	563	50,838.76	194	42	152	10,032
Omaha.....	720	45,752.94	212	26,811.00	137	22	115	7,708
Ponca.....	26	3,365.06						
Santee.....	309	23,865.80	272	19,213.00	18	7	11	1,017
Winnebago.....	223	12,184.56	79	4,814.76	39	13	26	1,312
Nevada	12	840.00			9		9	480
Carson.....	3	360.00						
Reno.....	2	320.00			2		2	320
Walker River.....	7	160.00			7		7	160
North Dakota	1,809	348,988.00	209	33,600.47	281	22	259	47,868
Fort Berthold.....	122	30,355.90	8	844.00	53		53	12,790
Fort Totten.....	101	9,449.80	40	3,190.67	30	13	17	1,777
Standing Rock.....	541	165,566.85	53	10,182.21	59		59	13,728
Turtle Mountain.....	1,045	143,615.45	108	19,383.59	139	9	130	19,573

¹ Restrictions removed under act June 21, 1906 (34 Stat. L., 353).

TABLE 28.—*Patents in fee issued under act of May 8, 1906 (34 Stat. L., 182), as modified by acts of May 29, 1908 (35 Stat. L., 444), and June 25, 1910 (36 Stat. L., 855)—Contd.*

States and superintend- encies.	Patents in fee issued from May 8, 1906, to June 30, 1919.				Applications for patents in fee during fiscal year ended June 30, 1919.			
	Original allotments.		Inherited land.		Re- ceived.	De- nied.	Approved.	
	Num- ber.	Acreage.	Num- ber.	Acreage.			Num- ber.	Acreage.
Oklahoma.....	3, 671	336, 940. 94	466	49, 246. 50	341	41	300	40, 090
Cantonment.....	59	8, 610. 88	30	4, 572. 66	6	2	4	720
Cheyenne and Arapa- ho.....	514	60, 414. 98	27	4, 066. 49	20	6	14	2, 484
Kiowa.....	245	38, 245. 14	24	3, 837. 86	28	3	25	6, 661
Otoe.....	176	16, 831. 38	20	2, 738. 15	28	.....	28	4, 047
Pawnee.....	177	20, 922. 31	58	5, 641. 58	21	4	17	2, 626
Ponca.....	294	26, 492. 01	38	4, 443. 36	49	17	32	4, 326
Sac and Fox.....	264	29, 734. 93	43	5, 286. 00	70	5	65	7, 621
Seger.....	47	4, 757. 77	2	260. 00	4	.....	4	400
Seneca.....	1, 154	68, 755. 08	189	12, 429. 46	26	2	24	1, 945
Shawnee.....	741	64, 176. 46	35	5, 670. 91	89	2	87	9, 241
Oregon.....	672	66, 101. 71	101	9, 219. 66	202	13	189	20, 485
Klamath.....	148	24, 214. 27	5	802. 72	43	3	40	5, 969
Roseburg.....	19	2, 754. 09	10	1, 511. 29	.....	.....	.....	.....
Siletz.....	166	15, 779. 74	19	1, 698. 76	142	3	139	13, 676
Umatilla.....	334	22, 673. 61	62	4, 446. 89	17	7	10	811
Warm Springs.....	5	680. 00	5	760. 00	.....	.....	.....	.....
South Dakota.....	4, 114	709, 415. 04	452	78, 498. 32	1, 090	138	952	106, 694
Cheyenne River.....	588	166, 442. 84	46	9, 261. 86	220	40	180	45, 538
Crow Creek.....	160	24, 692. 28	85	14, 004. 45	56	3	53	8, 020
Lower Brule.....	158	36, 886. 23	7	1, 069. 92	45	.....	45	9, 487
Pine Ridge.....	1, 297	215, 878. 52	164	32, 972. 29	411	5	406	12, 156
Rosebud.....	699	143, 115. 25	93	16, 194. 54	153	69	84	14, 443
Sisseton.....	259	26, 031. 72	14	1, 424. 14	56	12	44	4, 020
Yankton.....	953	96, 368. 20	43	3, 571. 12	149	9	140	13, 020
Utah: Uintah and Ouray..	46	3, 070. 00	.....	.....	41	1	40	2, 622
Washington.....	1, 021	93, 301. 09	315	24, 505. 51	417	6	411	38, 472
Colville.....	389	40, 830. 30	5	480. 00	165	.....	165	17, 796
Cushman.....	9	1, 003. 00	3	153. 90	2	.....	2	273
Spokane.....	107	10, 647. 50	1	80. 00	17	3	14	1, 337
Taholah.....	46	3, 530. 00	3	240. 00	5	2	3	210
Tulalip.....	39	4, 298. 36	1	163. 85	21	1	20	2, 163
Yakima.....	431	32, 991. 98	302	23, 387. 76	207	.....	207	16, 663
Wisconsin.....	1, 641	77, 315. 82	279	15, 528. 07	205	7	198	13, 197
Hayward.....	143	11, 031. 04	13	1, 040. 00	81	5	76	5, 936
Lea du Flambeau.....	22	1, 667. 14	7	558. 10	8	.....	8	633
La Pointe.....	160	12, 206. 22	37	3, 150. 85	39	.....	39	2, 939
Oneida.....	1, 250	48, 372. 12	221	10, 719. 12	56	1	55	2, 370
Red Cliff.....	65	3, 959. 30	1	80. 00	20	1	19	1, 239
Tomah.....	1	80. 00	.....	.....	1	.....	1	80
Wyoming: Shoshone.....	171	17, 185. 98	36	2, 241. 65	34	1	33	3, 108
Public domain.....	32	3, 778. 00	.....	.....	22	.....	22	2, 878

TABLE 28.—*Patents in fee issued under act of May 8, 1906 (34 Stat. L., 182), as modified by acts of May 29, 1908 (35 Stat. L., 444) and June 25, 1910 (36 Stat. L., 855)*—Contd.

SUMMARY OF PATENTS IN FEE ISSUED UNDER ACT OF MAY 8, 1906.

	Applica- tions ap- proved.	Acreage approved.
1907.....	889	92,132.50
1908.....	1,987	153,991.78
1909.....	1,166	133,331.79
1910.....	955	99,339.10
1911.....	1,011	115,575.37
1912.....	344	45,528.49
1913.....	520	67,477.49
1914.....	1,143	152,406.44
1915.....	940	124,114.86
1916.....	934	130,980.43
1917.....	2,203	265,440.00
1918.....	4,379	704,269.00
1919.....	4,368	553,376.00
Total.....	20,844	2,637,963.25

TABLE 29.—*Removals of restrictions.*

Fiscal year.	Quapaw (Seneca), Okla. ¹		Five Civilized Tribes. ²	
	Number.	Acreage.	Number.	Acreage.
Aggregate.....	588	30,506.82	12,294	858,264.32
1919.....	44	2,820.42	839	57,002.28
1918.....	24	960.00	1,532	141,524.30
1917.....	20	916.88	1,438	155,403.17
1916.....	30	1,401.45	697	42,103.60
1915.....	25	1,095.28	786	50,077.33
1914.....	72	3,889.35	1,106	81,034.72
1913.....	37	1,930.00	956	60,532.64
1912.....	53	3,218.28	652	45,075.51
1911.....	68	4,104.91	953	84,679.34
1910.....	215	10,170.25	1,470	88,070.34
1909.....			1,865	52,761.09

¹ Act of Mar. 3, 1909 (35 Stat. L., 751).² Act of May 27, 1908 (35 Stat. L., 312); by departmental approval.

NOTE.—Act of Congress dated May 27, 1908 (35 Stat. L., 312), removing restrictions from all lands of intermarried whites, freedmen, and Indians of less than half Indian blood, and from all lands except homesteads of Indians having half or more than half and less than three-quarters Indian blood, operated to remove restrictions from the lands of 70,000 Indians, who held 8,000,000 acres.

TABLE 30.—*Certificates of competency issued during fiscal year ended June 30, 1919, under act of June 25, 1910 (36 Stat. L., 855), to Indians holding fee patents with restrictions as to alienation.*

Indians to whom issued.	Number.	Acreage.
Aggregate.....	527	45,390
1919.....	94	7,491
1918.....	90	7,523
1917.....	65	4,440
1916.....	90	9,042
1915.....	66	5,616
1914.....	33	3,961
1913.....	23	1,600
1912.....	25	1,917
1911.....	42	3,810
Fort Hall, Idaho.....	6	1,081
Mount Pleasant, Mich.....	4	160
Grand Portage, Minn.....	17	1,078
Fond du Lac, Minn.....	10	800
Hayward, Wis.....	10	800
Lac du Flambeau, Wis.....	8	633
La Pointe, Wis.....	39	2,939

TABLE 31.—*Certificates of competency issued to Kaw and Osage Indians.*

Fiscal year.	Kaw. ¹		Osage. ²	
	Number.	Acreage.	Number.	Acreage.
Aggregate.....	79	21,104	548	269,050
1919.....	10	1,600	49	23,705
1918.....	10	1,600	17	8,330
1917.....	7	1,120	21	10,385
1916.....			4	1,960
1915.....	5	800	12	5,880
1914.....	12	1,904	4	1,960
1913.....	1	400	23	10,860
1912.....	1	480	22	10,860
1911.....			84	41,160
1910.....			293	143,570
1909.....	20	8,000	19	9,310
1908.....	6	2,400		
1907.....	6	2,400		
1906.....	1	400		

¹ Act July 1, 1902 (32 Stat. L., 636).

² Act June 28, 1906 (34 Stat. L., 539).

TABLE 32.—*Lands leased for mining purposes and production of minerals and royalty therefor, fiscal year ended June 30, 1919.*

		1899 to 1918 (both inclusive).				Fiscal year ended June 30, 1919.				
States and superintendencies.	Kind of lease.	Total production.	Revenue.			Total production.	Acreage.	Revenue.		
			Total royalty on production.	Bonus paid.	Advance royalty not credited on production, and other revenue. ¹			Total royalty on production.	Bonus paid.	Advance royalty not credited on production, and other revenue.
Total			2,455,025	39,708,468	8,960,084	4,606,112	2,211,583	8,889,749	6,298,244	896,120
California: Greenville.	Miscellaneous.		80			24				
Oklahoma.			2,369,735	39,675,210	8,757,680	4,504,751	2,152,763	8,874,437	6,298,248	861,444
Cantonment.	Miscellaneous.									
Cheyenne and Arapaho.	Oil and gas.		14,566			6,566	8,528			4,963
Kiowa.	do.		42,060			69,812	67,108		748,145	25,670
Osaage.	Oil (barrels).	\$100,136,557	900,000	12,634,601	7,533,192	282,737	403,000	4,581,733	5,447,762	130,960
	Gas.	(¹)		1,780,906			1,128,528	888,941		
	Oil (barrels).	(¹)	62,946		\$138,571	\$66,639	(¹)	37,732	1,812	48,477
Otoe.	Gas.			300				300		
Pawnee.	Oil (barrels).	192,646	227,058	109,410	31,219	89,184	1,864,734	252,098	182,086	40,397
Ponca.	Gas.							320	(¹)	
	Oil (barrels).	1,207,548	24,879	174,135	11,000	7,580	191,013	32,104	56,886	45,863
	Gas.	(¹)		73,961			(¹)		2,289	1,084
	Oil (barrels).	(¹)	36,306		27,397	\$127,628	5,000	13,000	1,530	400
Sac and Fox.	Gas.						(¹)	(¹)	900	
	Oil.		780		1,560	117		780		897
Sage.	Oil.									48
Shawnee.	Oil (barrels).		6,625		\$25,640	\$10,160		1,887		2,516
	Do.	282,078,512	823,332	20,249,358	\$961,936	\$3,317,976	10,180,862	95,049	2,689,896	506,728
	Gas.	(¹)		549,141					260,816	
Five Civilized Tribes: (restricted lands).	Coal (tons).	1,676,700	12,014	140,910	(¹)	8,643	178,421	1,598	14,200	89
	Miscellaneous.	15,481	106,052	4,325	(¹)	121,241	3,121	3,213	900	11,120
	Coal (tons).	\$51,837,938	119,658	4,000,437	(¹)	\$11,261	3,065,016	109,658	231,969	18,029
	Asphalt (tons).	(¹)	3,880	25,949	(¹)	\$15,000				
South Dakota: Pine Ridge.	Oil and gas.	(¹)	12,682		\$1,220	\$4,264		12,822		396
Washington: Spokane.	Miscellaneous.	(¹)	1,876	112		1,778		1,060	105	760

WYOMING.	70, 008	33, 149	191, 184	98, 305	44, 918	15, 207	9, 600	20, 335
Oil (barrels).....	73, 101	4, 756	4, 708	17, 947	5, 428	12, 934	3, 723	2, 162
Coal (tons).....	7, 441	1, 662	201	1, 960	321	5	8	166
Miscellaneous.....	(3)	9, 307	8	4, 929	(5)			
Oil (barrels).....	38, 887	4, 785	198, 476	51, 733	17, 120	39, 330	6, 877	18, 024
Coal (tons).....	347, 225	23, 394		18, 936	978	2, 175	94	

'In previous years the figures in this column were carried under the heading "Advance royalty and annual rental."

• From 1912 to 1918.

7 From 1911 to 1918.

• **Unallotted; all other allotted.**

From 1914 to 1918.

NO FOR 1978

* Does not include unpaid bonuses of about \$6,000,000.

TABLE 33.—*Buildings, etc., completed during the fiscal year ended June 30, 1919.*

State and superintendencies.	Improvement.	Cost.
Total		\$323,404.56
Arizona:		
Camp Verde	Water and sewer systems	3,500.00
Sells (Vamori and Santa Rosa)	Outhouses	805.99
Sells	Repairs to buildings	1,526.40
Navajo	Addition to water system	16,000.00
Colorado:		
Southern Ute	Electric lighting plant	4,395.00
Do	Employees' cottage	5,000.00
Do	Addition to power house	2,260.65
Ute Mountain	Water and sewer system	49,833.75
Do	Timber truss bridge	10,000.00
Idaho:		
Fort Lapwai	Employees' cottage	3,566.00
Do	Heating plant for cottage	653.55
Michigan:		
Mount Pleasant	Dairy barn	8,000.00
Montana:		
Fort Belknap	Flour mill	3,036.55
Do	Repairing dairy barn	1,400.00
Do	Schoolhouse and cottage	4,816.00
Nebraska:		
Genoa	Two employees' cottages	5,251.40
Nevada:		
Western Shoshone	Day schools (1 and 2)	4,000.00
New Mexico:		
San Juan	Repair to hospital	600.00
Do	One steel bridge	25,172.00
Navajo (Tohatchi)	Frame dormitory	46,000.00
Do	Remodeling old dormitory	5,119.89
Do	Repairs to school buildings	5,480.00
Pueblo Bonito	Addition to boiler house and boiler setting	2,817.00
Zuni	Flour mill	2,960.00
North Dakota:		
Turtle Mountain	Improvements to heating plant	442.09
Oklahoma:		
Bloomfield	Laundry and heating plant	19,938.00
Tishomingo	Two dormitories	54,800.00
Ponca	Salt Fork bridge	5,986.67
Cherokee O. T. School	Lavatory annexes, girls' dormitory	4,403.99
Euchee	Dining hall	1,365.30
Do	Rebuilding barn	2,000.00
Oregon:		
Umatilla (Tutuilla)	Day school and outhouses	4,381.30
South Dakota:		
Flandreau	Water tank	1,313.17
Do	Improvements to water system	1,091.25
Pierre	Silo	1,020.00
Rosebud	Repairs to day school	1,398.49
Pine Ridge	Remodeling schoolhouse	2,700.00
Wisconsin:		
Lac du Flambeau	Employees' quarters No. 112	9,780.00

TABLE 34.—Buildings, etc., under construction or contract during fiscal year ended June 30, 1919.

State and superintendencies.	Improvement.	Amount of authority granted up to June 30, 1919.
Total		\$695,508.00
Arizona:		
Colorado River	Employees' cottage	10,000.00
Fort Apache	Rebuilding boys' dormitory	42,263.81
Do.	Girls' lavatory annex	4,000.00
Phoenix	Repairing cottages	950.00
Pima	Transformer and pumphouse	3,028.63
San Carlos	Repairs to Black River Bridge	2,894.00
Sells	Hospital	25,000.00
Do.	Electric lighting plant	4,024.79
Do.	Stockman's cottage	3,669.53
Do.	Repairs to clerks' and superintendent's cottages	660.30
Do.	Garage	1,113.17
Do.	Barn	1,588.03
Do.	Shop	762.12
Western Navajo	Repairing suspension bridge, Tanners Crossing	4,000.00
California:		
Fort Yuma (Cocopah day school)	Day school building	1,927.40
Fort Yuma	Water system	1,463.34
Greenville	Water improvements, buildings, etc.	3,500.00
Sherman	Screen porches, addition to girls' building	4,500.00
Do.	Gymnasium	8,000.00
Colorado:		
Southern Ute	Electric lighting plant	4,395.00
Do.	Employees' cottage, heating system, and addition to laundry	5,000.00
Ute Mountain	Power house, mess hall, boys' dormitory, girls' dormitory, hospital, employees' cottage, schoolhouse, electric lighting	122,784.00
Montana:		
Crow	Improvements agency heating plant	1,673.85
Fort Belknap	Heating system, superintendent's cottage	629.46
Flathead	Employees' quarters	4,585.48
Do.	Warehouse	1,323.63
Tongue River	Dairy barn	3,000.00
Tongue River (Lame Deer day school)	Schoolhouse	1,200.00
Nebraska:		
Genoa	Two cottages	1,500.00
Do.	Addition to hospital	2,500.00
Do.	Employees' quarters	7,120.00
Do.	Water tank	5,400.00
Omaha	Heating plant	
Nevada:		
Carson	Improving heating plant	1,500.00
Do.	Addition girls' dormitory	18,000.00
North Carolina:		
Cherokee	Assembly hall and gymnasium	4,000.00
New Mexico:		
Albuquerque	Mess hall addition	13,050.00
Do.	Commissary	3,117.69
Do.	Repairs to office	1,719.69
Do.	Cottage	4,000.00
Do.	New roof on schoolhouse	813.17
Do.	Addition to warehouse	3,811.35
Jicarilla	Employees' cottage	1,800.00
Navajo	Gallup Mesa Verde Highway	25,000.00
Pueblo Bonito	Mess hall No. 33	67,620.00
Do.	Addition to schoolhouse	
San Juan	Farmington Bridge	29,000.00
Do.	Plumbing installation four cottages	600.00
Do.	Labor and additional material for hospital	7,000.00
Do.	Lavatory annexes	5,200.00
Do.	Toadlena water system	5,500.00
Do.	Toadlena lavatory annexes	2,500.00
Tohatchi	Extension sewer	495.00
North Dakota:		
Bismarck	Remodeling dormitories	894.00
Wahpeton	Two cottages	7,000.00
Do.	Industrial cottage	
Fort Totten	Heating plant	15,000.00

TABLE 34.—*Buildings, etc., under construction or contract during fiscal year ended June 30, 1919—Continued.*

State and superintendencies.	Improvement.	Amount of authority granted up to June 30, 1919.
Oklahoma:		
Cherokee, O. T. School.....	Electric lighting.....	\$4,326.14
Do.....	Shop building.....	5,215.00
Do.....	Dairy barn.....	5,793.00
Eufaula.....	Laundry building.....	4,177.00
Jones Male Academy.....	Barn.....	469.12
Kiowa.....	Police cottage.....	900.00
Muskogee Academy.....	Electric lighting plant.....	890.00
Seger.....	Delco electric lighting plant.....	4,658.00
Seneca.....	Three cottages.....	4,000.00
Shawnee.....	Heating plant.....	2,072.00
Do.....	Repairs sewer and toilets.....	1,390.00
Do.....	Lavatory annexes and screen porches.....	
Tishomingo.....	Two dormitories.....	65,000.00
Wheelock Academy.....	Boiler, pipe and fittings, return trap.....	4,000.00
Do.....	Balance equipment.....	1,496.00
Oregon:		
Klamath.....	Office building.....	4,319.89
Do.....	Indian homes.....	4,495.00
Do.....	Employees' quarters.....	8,000.00
Salem.....	Addition to hospital.....	3,723.71
South Dakota:		
Canton Asylum.....	Painting various buildings.....	2,304.00
Flandreau.....	Repair and equipment of shop building.....	6,509.00
Do.....	Remodeling heating system.....	6,509.00
Pine Ridge.....	Remodeling academic building.....	1,535.00
Do.....	Electric lighting plant.....	4,500.00
Pierre.....	Boiler stock and setting.....	10,583.00
Rosebud.....	Two lavatory annexes.....	7,400.00
Do.....	Frame cottage.....	4,129.61
Sisseton.....	Schoolhouse.....	3,398.55
Do.....	Employees' quarters.....	3,805.80
Do.....	Hot-air heating system.....	390.00
Wisconsin:		
Lac du Flambeau.....	Boiler stock, breechings, and improvement to heating system.....	6,656.00
Do.....	Physicians' cottage.....	4,690.00
Wyoming:		
Shoshone.....	Hospital.....	7,257.25
Western Shoshone.....	Employees' quarters No. 109.....	1,700.00

TABLE 35.—Number and value of individual and tribal live stock, poultry, etc., belonging to Indians, and value of stock purchased, sold, and slaughtered, fiscal year ended June 30, 1919.

States and superintendencies.	Value.		Number of stock on reservation.						Value of stock.	
	All stock.	Other stock (horses, swine, poultry).	Horses and mules.	Mares.	Stallions and jacks.	Cattle.			Purchased.	Sold. ¹
						Cows and heifers.	Steers.	Bulls.		
Total, 1919	\$87,878,272	\$996,822	181,735	94,398	5,289	223,374	97,360	7,542	\$640,498	\$2,718,531
1917	37,401,101	842,803	124,119	53,398	5,035	205,501	83,543	7,893	387,365	3,536,713
1918	32,944,480	641,053	136,221	58,074	5,123	217,984	82,550	6,793	683,117	1,137,512
1916	25,894,480	437,510	174,580	87,314	5,382	232,784	68,942	6,493	634,445	1,008,170
1915	27,166,323	442,063	215,328	127,319	6,445	137,006	68,581	6,055	1,568,525	1,191,733
1914	24,223,461	490,232	215,610	145,648	10,772	186,965	64,531	4,719	1,568,509	1,571,994
1913	22,777,975	(²)	233,903	233,986	23,264	100,177	(³)	4,386	1,786,257	534,774
1912	22,283,242	(²)	531,123	(⁴)	(⁵)	205,114	(⁶)	(⁷)	1,786,257	1,786,257
1911	17,971,209	(²)	330,000	(⁴)	(⁵)	205,321	(⁶)	(⁷)	1,786,257	1,786,257
1900	8,137,515	(²)	333,337	(⁴)	(⁵)	257,610	(⁶)	(⁷)	1,786,257	1,786,257
1890	6,354,441	(²)	443,344	(⁴)	(⁵)	170,419	(⁶)	(⁷)	1,786,257	1,786,257
Arizona.	8,675,369	68,189	58,269	24,732	2,270	60,336	23,504	2,505	8,588	1,061,555
Camp Verde.	1,895	515	36	22		525	116	29		331
Colorado River.	87,642	1,782	287	247	36	10,350	1,726	400		275
Fort Apache.	312,475	18,400	3,508	3,450	7	575		133	7,838	12,076
Tribal.	47,796					95		5		1,270
Havasupai.	10,285	205	337	275	3		20			850
Kalab.	5,466	15	26	10						1,270
Tribal.	19,845					278	114	20		85
Leupp.	941,214	3,750	2,360	2,000	(¹)	1,000	1,000	156,012	20,800	10,000
Moqui.	950,000	4,200	6,060	3,883	235	2,100	6,000	100	107,000	99,000
Navajo.	2,948,272	4,232	24,660	(⁸)	(¹)	15,000	(⁹)	(¹⁰)	905,000	99,000
Pima.	385,575	4,000	4,328	1,500	(¹)	2,065	1,303	150	500	19,000
Salt River.	119,115	12,000	848	1,944	83	940	336	36	250	13,150
Tribal.	14,500					214	220	25		
San Carlos.	143,607	16,000	3,080	6,000	(¹)	1,898	106	35	900	1,200
Tribal.	175,632					3,215	273			
Sells.	1,030,820	1,330	6,350	350	1,409	15,060	11,050	1,008	188,000	21,750
Truxton Canon.	20,200		100	(¹¹)	3	300	90			
Tribal.	51,461		61			653	164	66		
Western Navajo.	809,700	2,700	6,360	6,000	500	2,000	2,000	126	940,000	19,070

¹ Includes some tribal stock also.
² Includes tribal stock valued at \$2,837,705.
³ Unknown.
⁴ Included with horses and mules.
⁵ Included with cows and heifers.
⁶ 1913 report.

TABLE 35.—Number and value of individual and tribal live stock, poultry, etc., belonging to Indians, and value of stock purchased, sold, and slaughtered, fiscal year ended June 30, 1919—Continued.

States and superintendencies.	Value.		Number of stock on reservation.						Value of stock.		
	All stock.	Other stock (horses, mules, swine, poultry).	Horses and mules.	Mares.	Stallions and jacks.	Cattle.			Purchased.	Sold.	Slaughtered.
						Cows and heifers.	Steers.	Bulls.			
California.	702,432	79,304	3,143	2,435	20	4,246	1,538	229	440	72,182	10,022
Bishop.	74,594	4,519	670	300		200	20	1		3,151	288
Campo.	31,165	3,195	47	77		200	88	11		2,100	105
Digger.	650	150								7,940	300
Fort Bidwell.	14,865	1,565	250	120		25	10	2		6,250	
Fort Yuma.	50,080	12,255	36	200		400	150	27	(¹)		
Greenville.	123,850	15,575	655	575		200	400	20			1,600
Hoop Valley.	60,050	9,200	205	175	1	525	70	5		3,175	1,200
Malik.	44,640	3,600	130	190	2	328	80	13	100	11,456	1,960
Pala.	62,738	7,913	315	222	3	980	400	6		9,150	
Round Valley.	98,802	14,727	90	70		32					
Tribal.	12,228	300				816	280	116	340	8,975	4,269
Roboba.	102,810	4,595	425	298	2	540	60	8		5,365	320
Tule River.	44,460	1,710	310	210	10						
Colorado.	67,860	860	885			375		7	4,348	66,512	1,215
Southern Ute.	41,560	860	485			125		3	4,348	1,100	1,215
Ute Mountain.	26,300		400	(¹)		250		4		65,412	
Florida: Seminole.	11,675	6,300	26	10			20				
Idaho.	883,608	23,433	3,519	2,028	54	8,196	1,231	193	6,059	136,728	23,440
Coeur d'Alene.	136,580	13,705	1,075	(¹)	12	1,150	80	19	3,419	38,141	18,050
Fort Hall.	375,400	1,200	1,200	1,600	30	5,015	590	40		78,022	4,340
Tribal.	92,740	4,320				5,996	84	122			
Fort Lapwai.	258,888	5,408	1,244	428	12	1,037	477	12	2,640	20,565	1,070
Iowa: Sac and Fox.	9,220	1,120	90	90						600	900
Kansas.	577,550	154,570	1,066	428	11	1,572	250	50	2,481	14,850	4,330
Kickapoo.	415,560	137,850	735	1	1	915	12	34	1,550	14,860	4,330
Potawatomi.	161,990	6,730	331	253	10	688	238	16	881	(¹)	

	17,588	4,637	75	1,265	32	1,930	545	153	1,450	3,320	26,754	13,080
Michigan: Mackinac.....	470,155	77,580	1,149	1,265	70	80	1	3				
Minnesota.....	27,300	4,000	30			100	15	11				
Fond du Lac.....	445	170	2	142	15	100	15	11				
Grand Portage.....	35,005	11,930	150	35	1	6		4		1,165		
Leech Lake.....	3,700	20	20	5		3						
Pett Lake.....	2,370	145	28	5		3						
Pipestone (Birch Cooley).....	174,410	30,760	311	513	4	540	220	60	1,350	2,155	26,754	13,080
Red Lake.....	226,925	30,375	608	500	12	1,200	310	75	100	(*)	(*)	(*)
White Earth.....												
Montana.....	8,668,384	94,065	26,551	20,633	331	62,005	32,783	1,368	6,070	74,468	741,428	38,703
Blackfeet.....	4,253,625		8,000	5,000	25	35,000	20,000	400	3,060		315,000	
Tribal.....	302,585		42	20		*3,305	1,306	150				
Crow.....	814,850	6,070	3,000	2,500	107	4,000	2,000			80,400	60,000	4,000
Tribal.....	892,975		160	(*)		6,531	4,882	494			110,531	
Flathead.....	816,200	7,350	2,000	1,000	15	4,500	1,400	80	3,020	11,510	63,750	22,000
Fort Belknap.....	143,600	7,370	7,000	3,000	20	800	422	35				804
Tribal.....	168,294		23	2	1	1,788	817	69				
Fort Peck.....	639,900	6,900	5,000	5,000	40	2,000	400	50			70,050	5,980
Rocky Boy's Agency.....	13,875	185	125	131	31	11				1,378	2,200	2,395
Tongue River.....	485,080	48,250	1,201	4,000	72	3,000	1,400	8		1,200	118,865	5,564
Tribal.....	137,450	24,940				1,019	156					
Nebraska.....	250,792	45,192	1,275	620	2	225		8		15,049	16,225	10,450
Omaha.....	156,325	23,725	740	500	2	150		7				
Winnebago.....	94,467	21,467	535	120		75		1		15,049	16,225	10,450
Nevada.....	294,562	10,697	4,967	1,125	5	2,140	716	51			42,398	6,244
Fallon.....	13,598	2,208	94	111		25					1,316	69
Fort McDermitt.....	8,925	75	270	(*)		6					575	575
Mosapa River.....	5,400	650	50	30							2,617	1,500
Nevada.....	21,880	300	300	(*)		228	50	4			5,280	1,100
Walker River.....	36,315	2,490	183	184		401	66					
Tribal.....	35,460					*455		23				
Western Shoshone.....	124,974	974	800	800	5	1,000	600	24			32,608	4,000
Tribal.....	2,900											
Reno, special agent.....	35,300	4,300	3,000			25						
New Mexico.....	4,198,384	16,670	15,949	13,300	1,105	16,090	4,332	658	342,767	4,616	312,308	151,725
Jicarilla.....	115,610	344	1,308	(*)	45	450	75	6	7,300	4,616	8,940	4,700
Tribal.....	142,310	128	27			908	170	56	8,885			
Mescalero.....	117,323	105	468	1,000	30	845	190	9	7,680		2,015	805
Tribal.....	217,350		48	(*)	10	2,470	1,320	80				
Pueblo Bonito.....	632,000	1,500	2,600	2,500	160	1,500	200	75	115,000			
Tribal.....	3,360								115,428			

* Includes steers and calves.

* Includes calves.

* No data.

* Included with horses.

* Not known.

TABLE 35.—Number and value of individual and tribal live stock, poultry, etc., belonging to Indiana, and value of stock purchased, sold, and slaughtered, fiscal year ended June 30, 1919—Continued.

States and superintendencies.	Value.		Number of stock on reservation.						Value of stock.		
			Horses and mules.	Mares.	Stallions and jacks.	Cattle.			Purchased.	Sold.	Slaughtered.
	All stock.	Other stock (horses, swine, poultry).				Cows and heifers.	Steers.	Bulls.			
New Mexico—Continued.											
Pueblo Day Schools.	\$1,202,748	\$7,413	3,283	3,000	89	5,919	1,087	307	71,966	\$112,338	\$89,090
San Juan.	1,325,625	3,000	7,800	6,000	450	4,000	1,200	75	95,080	128,760	48,500
Tribal.	4,000								199		
Zuni.	87,780	4,180	440	800	312	500	100	50	36,000	60,265	58,700
North Carolina: Cherokee.	81,550	14,600	100	25		600	300	20	125	19,675	
North Dakota.	1,800,902	18,137	7,887	8,908	73	9,516	4,808	240	462	94,926	25,788
Fort Berthold.	544,925	2,673	4,158	(1)	7	3,825	2,000	40		69,750	5,880
Fort Totten.	59,356	788	250	250		25			2	2,381	1,750
Standing Rock.	938,761	6,334	2,577	3,178	58	4,716	2,553	175		1,750	400
Turtle Mountain.	237,860	8,340	902	475	8	950	250	35	460	22,427	19,508
Oklahoma.	1,906,525	86,054	5,160	1,932	50	6,800	10,680	163	865	297,442	184,074
Cantonment.	84,949	1,735	450	300	10	90		2	14	4,580	2,420
Cherokee and Arapaho.	183,492	7,412	784	128	11	251	167	15		15,982	
Kiowa.	4,160,000	(8)	(9)	(7)	(9)	(9)	(9)	(9)		50,874	(9)
Osage.	1,088,716	26,235	1,175	430	11	4,873	10,265	151	780	3,880	255,975
Ofoe.	77,356	1,992	360	175		82	7		1	5,200	1,504
Pawnee.	42,332	5,317	186	172		138		5		1,080	
Ponca.	65,290	5,750	430	152	15	229	50			5,670	5,670
Sac and Fox.	46,648	9,064	197	13		173	36	3	6	1,550	6,538
Seger.	46,815	1,325	310	188		68			6	2,060	1,880
Seneca.	119,780	15,920	698	160	1	300	125	4	(9)	28,275	800
Shawnee.	81,148	11,304	500	244	2	686	40	13	4		(9)
Oregon.	1,084,790	22,720	4,665	1,468	136	7,740	2,510	289	705	238,729	12,800
Klamath.	682,580	3,380	1,800	500	25	7,000	1,620	15	200	238,729	100,450
Tribal.	28,500				7			215			
Shaw.	20,820	1,880	70	28		130	40	8	500	(9)	(9)
Umatilla.	268,040	16,080	1,060	970	50	220	350	21		29,500	8,250
Warm Springs.	84,880	1,450	1,135	(1)	54	400	800	24		20,000	4,530

South Dakota.	4, 008, 682	108, 209	18, 790	17, 854	798	57, 287	8, 886	894	8, 119	80, 871	406, 965	55, 990
Cheyenne River Tribal.	692, 519	4, 514	3, 516	3, 509	165	6, 045	447	66	1, 222	22, 600	64, 635	7, 325
Crow Creek Tribal.	59, 696	664	64	26	14	204	7	75	1, 402	4, 620	(*)	(*)
Grand River Tribal.	314, 150	10, 980	1, 368	1, 650	20	1, 700	880	15			300	200
Lower Brule Tribal.	287, 805	4, 705	600	1, 200	12	1, 800	850	15		745	8, 640	200
Pine Ridge Tribal.	46, 110		15	323	149	9, 958	3, 648	39				
Roadbud Tribal.	1, 486, 190	17, 890	6, 753	4, 986	446			22		18, 196	296, 865	37, 085
Sisseton Tribal.	1, 561, 400	49, 400	4, 520	5, 000	95	6, 000	2, 500	90		36, 000	72, 625	11, 400
Yankton.	156, 250	13, 550	480	1, 033	4	4, 400	40	30	200		(*)	(*)
Utah.	392, 534	7, 69, 178	1, 740	1, 033	17	832	98	17	265	3, 710	(*)	(*)
Utah.	827, 107	6, 887	1, 885	847	97	6, 347	325	252	7, 016	16, 857	28, 900	1, 500
Godmille.	11, 400	550	128	15	2	35	35	2				
Shilwits.	3, 400	150	50	10								
Utah and Ouray.	811, 907	5, 837	1, 712	822	95	6, 312	500	250	7, 016	16, 857	28, 900	1, 500
Washington.	1, 089, 127	61, 226	3, 578	1, 562	128	7, 133	1, 794	196	6, 491	20, 700	165, 279	20, 615
Colville Tribal.	500, 223	18, 876	1, 465	1, 036	70	3, 621	1, 137	101	200		114, 520	16, 944
Cushman.	22, 300	2, 001	116	107		279	51	9			3, 337	910
Neah Bay.	26, 915	2, 261	63	47	2	150	25	4	75		1, 075	1, 635
Spokane.	13, 376	4, 600	250	126	17	400	20	11			4, 090	1, 525
Tribal.	43, 550	4, 433	47	29	4	59	10	5			42, 257	611
Tribal.	11, 877	14, 266	177	137	1	439	51	35	1, 316	3, 325		
Yakima.	98, 676	20, 800	1, 431	30	27	2, 000	500	31	5, 000	17, 375		
Wisconsin.	322, 010											
Grand Rapids.	477, 326	36, 272	1, 743	729	25	2, 028	72	35	84	17, 295	16, 827	9, 175
Hayward.	31, 675	1, 955	208	60		31		0		1, 853		
Keshena.	36, 910	6, 460	100	100	5	200		1			2, 150	75
Lac du Flambeau.	98, 029	8, 050	344	180	12	214	12	10	34		3, 267	3, 580
Leona.	20, 675	1, 150	75	17		35		2				
La Pointe.	43, 645	2, 085	80	91	8	91				5, 640		
Onondaga.	90, 080	6, 080	96	150		180	60	9	50	6, 630	10, 800	5, 310
Red Cliff.	138, 080	6, 040	815	(*)		1, 010					(*)	(*)
Wyoming.	18, 292	1, 592	26	12		82		7		3, 152	1, 080	200
Shoshone Tribal.	394, 074	4, 210	1, 223	1, 300	131	8, 745	3, 141	270	200	4, 475	45, 150	6, 200
Shoshone Tribal.	508, 380	4, 210	1, 200	1, 300	110	4, 000	1, 200	90	200	4, 475	45, 150	6, 200
Shoshone Tribal.	357, 694		23		21	4, 745	1, 941	100				

* Estimated.
 * Report 1918 overestimated.
 * Report 1918 included calves.
 * Underestimated last year.
 * Includes ponies.
 * Not reported.

TABLE 36.—*Distribution of Government property valuations June 30, 1919.*

States and superintendencies.	Total value.	General administration.	Health.	Allotting.	Irrigation.	Farming.	Forestry.	School.
Grand total.....	\$42,139,647	\$3,288,311	\$1,664,543	\$13,862	\$19,235,505	\$1,741,531	\$1,111,865	\$15,084,530
Arizona.....	3,174,801	385,798	295,412	1,895	2,557	163,241	34,894	2,291,004
Camp Verde.....	45,755	27,718	325					17,712
Colorado River.....	111,995	8,035	5,000			9,733		89,227
Fort Apache.....	376,911	68,758	11,870				19,548	276,735
Fort Mojave.....	114,564	1,060	6,189			8,611		98,714
Havasupai.....	6,825	2,755	240			1,500		2,270
Kaibab.....	6,885	1,812	70					5,003
Leupp.....	112,205	10,975	7,509	550	1,465	3,628		88,067
Moqui.....	201,083	38,347	33,027			6,780		122,919
Navajo.....	619,430	64,101	43,517	595	1,092	13,310	3,096	493,719
Phoenix.....	1,629,532		108,450					521,052
Pima.....	263,676	23,855	28,730	750		39,798		170,555
Salt River.....	47,348	22,216	825					24,307
San Carlos.....	2,268,394	80,224	10,385			24,075	12,250	141,460
Sells.....	104,485	26,118	25,000			16,558		36,811
Truxton Canon.....	125,414	7,136	8,684			11,240		98,354
Western Navajo.....	140,299	2,700	5,600			27,950		104,049
California.....	1,093,657	51,144	61,526	125	43,461	90,546	4,558	842,297
Bishop.....	33,137	760	100	125		240		31,912
Campo.....	11,793	2,285	200			1,050		8,258
Digger.....	10,345	10,345						
Fort Bidwell.....	101,367	680	2,000					98,687
Fort Yuma.....	107,759		4,000					103,759
Greenville.....	74,143	200	5,105					68,838
Hoopa Valley.....	117,574	7,889	22,369			0,225	1,925	79,166
Maki.....	15,024	12,294	210		1,900			1,220
Pala.....	65,614	10,010	1,620		41,486	4,260		8,238
Round Valley.....	85,007	3,650	550			500	2,405	78,502
Sherman Institute.....	412,359		24,472			66,498		321,389
Soboba.....	42,669	1,125	900			11,773		28,871
Tule River.....	15,666	1,900			75		228	13,457
Colorado.....	111,350	60,403	1,139		2,175			47,573
Southern Ute.....	95,508	47,831			2,175			45,502
Ute Mountain.....	15,842	12,632	1,139					2,071
Florida: Seminoles.....	2,306	654				1,652		
Idaho.....	483,977	85,568	102,754		40,450	33,709	2,118	219,378
Coeur d'Alene.....	64,713	50,582	1,320			1,180	1,118	10,513
Fort Hall.....	287,204	34,986	15,850		40,450	27,179		168,739
Fort Lapwai.....	132,060		85,584			5,350	1,000	40,126
Iowa: Sac and Fox.....	89,578		83,450					6,128
Kansas.....	687,446	9,300	25,315			104,891		487,940
Haskell Institute.....	588,843		25,039			157,878		405,927
Kickapoo.....	81,593		277			7,013		77,303
Potawatomi.....	14,010	9,300						4,710
Michigan.....	217,578	1,241	11,515				458	234,364
Mackinac.....	2,522	1,241					458	823
Mount Pleasant.....	215,056		11,515					233,541
Minnesota.....	937,985	133,919	95,388			1,934	31,519	675,225
Fond du Lac.....	31,979	5,615	25,124			80		4,160
Grand Portage.....	8,996	8,982						104
Leech Lake.....	134,909	41,174	7,077					90,656
Nett Lake.....	39,508	4,200	275				271	31,702
Pipestone (Birch Cooley).....	234,709		6,815					227,894
Red Lake.....	158,820	21,528	27,648			1,854	7,248	100,542
Vermilion Lake.....	81,377						24,000	57,377
White Earth.....	234,097	52,520	28,449					158,728

¹ Value of buildings overestimated last year.

² Includes Rice Station.

TABLE 36.—*Distribution of Government property valuations June 30, 1919—Continued.*

States and superintendencies.	Total value.	General administration.	Health.	Allotting.	Irrigation.	Farming.	Forestry.	School.
Montana.....	\$1,192,406	\$372,728	\$69,075	\$740	\$248,205	\$154,285	\$24,537	\$312,836
Blackfeet.....	173,300	30,836	23,417			6,555	2,025	110,467
Crow.....	278,118	100,306	20,850			45,700	475	110,787
Flathead.....	363,496	91,235	3,000		246,755	6,995	14,937	574
Fort Belknap.....	366,357	78,220	3,800		(*)	44,700	3,000	236,637
Fort Peck.....	145,455	41,142	15,310	740	(*)	12,965		75,278
Rocky Boy's Agency.....	12,041	7,545	98			2,673		1,725
Tongue River.....	145,639	23,444	2,600		1,450	34,677	4,100	77,368
Nebraska.....	556,772	67,694	47,436			40,525		401,067
Genoa.....	399,397		10,330					399,067
Omaha.....	45,050	7,525				40,525		
Winnebago.....	109,325	60,169	37,156					12,000
Nevada.....	531,745	115,513	45,067		6,175	63,905		301,060
Carson.....	227,784	1,796	19,857			38,127		168,004
Fallon.....	15,262							15,262
Fort McDermitt.....	21,536	4,260	3,000		25	3,575		11,086
Moapa River.....	8,481		50		150			6,281
Nevada.....	74,537	7,150						67,387
Walker River.....	28,754	6,575	1,565		6,000	7,267		7,047
Western Shoshone.....	115,154	56,595	20,580			14,936		23,043
Reno, special agent.....	38,897	38,852	35					
New Mexico.....	1,752,790	93,464	114,313	250	11,475	101,375	23,065	1,408,848
Albuquerque.....	369,362	10,949	11,832					357,530
Jicarilla.....	176,636	36,040	22,187			21,229	8,965	89,215
Mescalero.....	168,896	26,375	21,705			16,061	10,650	94,066
Pueblo Bonito.....	168,640		3,500	250		9,240		155,650
Pueblo Day Schools.....	148,715	11,100	16,353			11,750		109,512
San Juan.....	304,245	8,750	26,190			16,970	3,300	249,135
Santa Fe.....	260,224		3,258					246,966
Zuni.....	155,033	250	9,288		11,475	26,125	150	107,745
New York: New York Agency.....	710	135	575					
North Carolina: Cherokees.....	178,433		3,030				4,260	171,153
North Dakota.....	1,118,867	190,744	76,837	313		60,981		784,992
Bismarck.....	78,312							78,312
Fort Berthold.....	91,240	60,172	2,180	313		20,630		7,945
Fort Totten.....	242,735	7,479	6,638			4,010		224,608
Standing Rock.....	371,625	70,200	31,175			30,325		233,925
Turtle Mountain.....	98,536	41,065	16,779			6,016		26,956
Wahpeton.....	236,119	5,908	20,065					210,246
Oklahoma.....	3,610,543	258,068	173,749	75		285,933		2,892,713
Cantonment.....	168,381	6,000	800	75		94,325		7,181
Cheyenne and Arapaho.....	421,060	23,946	20,059			88,767		288,288
Chilocco.....	855,179		4,500					850,679
Choctaw-Chickasaw Sanatorium.....	78,585		78,585					
Five Civilized Tribes.....	51,968	51,968						
Kiowa.....	600,710	42,950	60,825			77,324		419,611
Osage.....	224,520	40,340	1,215			1,600		181,365
Otoe.....	72,874							72,874
Pawnee.....	128,604	23,766	757					104,081
Ponca.....	87,717	27,950	250					59,517
Sac and Fox.....	54,766	13,986	1,304					39,476
Seger.....	196,767	15,127	3,202			741		177,697
Seneca.....	31,245		750					30,495
Shawnee.....	113,698	6,310						107,388
Total.....	3,086,074	252,343	167,747	75		262,757		2,408,153

* 1918 report.

* No data.

* Overestimated last year.

* As reported.

TABLE 36.—Distribution of Government property valuations June 30, 1919—Continued.

States and superintendencies.	Total value.	General administration.	Health.	Allotting.	Irrigation.	Farming.	Forestry.	School.
Oklahoma—Contd.								
Five Civilized Tribes Schools.	\$524,469	\$5,725	\$1,502			\$23,181		\$494,061
Armstrong Academy.	54,662							54,662
Bloomfield Seminary.	65,426							65,426
Cherokee Orphan School.	82,147							82,147
E u c h e e Boarding School.	53,626	5,146	23			19,681		23,776
E n f a u l a Boarding School.	50,221		1,014			3,500		45,707
Jones Male Academy.	32,068							32,068
Mekuskey Academy.	63,937	579	405					62,953
N u y a k a Boarding School.	42,385		60					42,325
Tuskahoma Academy.	39,855							39,855
Wheelock Academy.	40,142							40,142
Oregon.	770,014	21,283	27,435		\$10,000	102,196	\$35,400	573,730
Klamath.	108,360	6,775	2,589		10,000	11,635	23,069	109,310
Salem.	250,138		20,200					229,938
Slletz.	18,156	7,401	1,660				350	8,545
Umatilla.	135,445	3,182				87,631		47,632
Warm Springs.	99,925	3,925	2,795			2,900	12,000	78,305
South Dakota.	3,219,204	606,960	318,609	\$330	26,629	391,594	189,132	1,595,600
Canton Asylum.	158,084		158,084					
Cheyenne River.	463,871	196,349	42,713			99,901		124,908
Crow Creek.	127,674	29,199	17,667			18,009		62,808
Flandreau.	336,309	8,543	6,803			87,472		228,481
Hope.	38,043							38,043
Lower Brule.	131,002	59,524	5,854			8,850		55,774
Pierre.	306,557		7,184		26,600	52,393		219,499
Pine Ridge.	729,293	216,485	22,247	380	129	36,022	189,067	265,043
Rapid City.	265,387	3,540	5,540			62,602		195,706
Rosebud.	457,186	107,558	48,808			24,769	75	276,486
Sisseton.	78,483	19,643	450					58,390
Yankton.	128,243	56,139	4,057			1,594		66,463
Utah.	366,613	170,163	8,484		47,697		6,369	33,009
Goahute.	4,570							4,570
Shivwits.	11,120		2,185					8,965
Uintah and Ouray.	250,923	170,163	6,329		47,697		6,360	20,374
Washington.	1,113,083	286,529	68,762			47,643	41,384	673,715
Colville.	164,811	70,754	5,192			36,658	81,834	20,372
Cushman.	377,623	2,443	12,780					362,425
Neah Bay.	15,722	11,162						4,560
Spokane.	186,716	130,078	34,340					16,298
Tabalah.	20,134	12,269	680					7,065
Tulalip.	221,948	30,218	8,479				1,645	181,606
Yakima.	126,079	23,600	2,300			10,985	7,905	81,389

¹ 1918 report.² Land overestimated last year.³ Formerly Springfield.⁴ Includes forest reserve.⁵ Increase due to supplies on hand and miscellaneous property.⁶ Decrease due to decreased stock value.⁷ Decrease due to decreased valuation old Spokane Sanatorium.

TABLE 36.—*Distribution of Government property valuation June 30, 1919—Continued.*

States and superintendents.	Total value.	General adminis- tration.	Health.	Allot- ment.	Irrigation.	Farming.	Forestry.	School.
Wisconsin.....	\$1,471,462	\$65,166	\$39,312	\$600	.....	\$31,506	\$666,690	\$649,183
Grand Rapids....	1,573	1,573	.....	.....	.....	.....	.....	.....
Hayward.....	173,478	4,682	6,070	.....	.....	29,196	50	133,590
Keshena.....	867,368	47,927	13,423	.....	.....	.....	695,290	130,718
Lac du Flambeau	113,364	1,220	2,236	.....	.....	.....	.....	109,908
Leona.....	1,105	745	360	.....	.....	.....	.....	.....
La Pointe.....	9,932	8,679	383	600	.....	220	50	.....
Oneida.....	60,888	.....	1,460	.....	.....	.....	.....	68,428
Red Cliff.....	3,670	440	520	.....	.....	2,090	300	320
Tomah.....	211,094	.....	4,960	.....	.....	.....	.....	208,234
Wyoming: Shoshone.	438,663	153,953	10,000	.....	\$68,750	5,650	18,500	181,810
State totals.....	23,394,933	3,220,512	1,664,643	4,378	507,574	1,741,531	1,111,865	15,094,530
Miscellaneous.....	18,804,714	67,790	.....	8,864	18,727,931	.....	.....	.....
Warehouses.....	12,884	12,884	.....	.....	.....	.....	.....	.....
Liquor suppres- sion.....	1,650	1,650	.....	.....	.....	.....	.....	.....
Allotting service.....	18,864	.....	.....	18,864	.....	.....	.....	.....
Irrigation service (cost).....	18,727,931	.....	.....	.....	18,727,931	.....	.....	.....
Indian office.....	64,265	64,265	.....	.....	.....	.....	.....	.....

¹ Last year's report.

TABLE 37.—*Value of Indians' individual and tribal property, June 30, 1919.*

States and superin- tendencies.	Total Indi- vidual and tribal property.	Individual.					Tribal.					
		Total.	Lands exclusive of timber.	Timber.	Funds in banks and in hands of superin- tendents. ¹	Homes, furniture, barns, etc.	Wagons, imple- ments, etc.	Stock, poultry, and other property.	Total.	Lands exclusive of timber.	Timber and stock.	Balance of funds in Treasury.
Total, 1919.....	\$630,408,869	\$470,849,838	\$362,973,052	\$10,614,139	\$30,926,132	\$20,661,090	\$7,537,280	\$47,618,145	\$219,089,031	\$107,302,253	\$74,588,805	\$37,172,968
1918.....	667,087,704	442,626,245	353,643,882	11,044,615	29,020,264	13,620,799	5,968,848	35,302,877	324,461,439	105,800,281	47,986,057	42,675,101
1917.....	655,512,661	432,225,913	351,398,172	10,937,168	21,011,127	12,040,371	5,361,664	31,277,413	229,286,748	102,724,886	46,428,222	44,133,390
1916.....	653,418,463	449,073,600	349,073,600	11,086,545	16,101,625	12,635,814	4,860,244	33,932,619	225,720,815	105,815,540	47,628,527	44,281,048
1915.....	658,262,436	438,116,941	368,080,944	11,369,277	12,224,156	10,827,552	4,244,948	31,420,226	220,455,595	101,390,579	47,628,526	42,106,080
1914.....	667,454,639	434,872,202	372,776,671	11,373,084	12,351,557	9,924,483	3,786,908	29,776,908	223,682,436	111,396,816	74,068,412	47,092,209
1913.....	666,931,263	426,436,765	368,890,835	11,766,023	11,200,525	8,337,204	2,815,071	22,296,508	240,944,067	120,701,799	73,128,997	46,068,701
1912.....	648,680,952	404,265,024	348,504,263	11,745,511	10,068,276	8,276,073	2,641,908	22,968,945	244,424,068	127,863,467	72,011,067	44,519,534
1911.....	622,134,254	380,834,110	331,420,404	9,106,470	10,735,723	7,796,805	2,282,379	19,639,329	245,200,144	124,942,410	75,413,904	41,843,880
Arizona.....	54,705,108	12,821,156	3,572,327	.....	11,269	339,550	333,395	8,564,615	41,888,952	29,958,344	11,589,254	336,354
Camp Verde.....	3,495	735,615	610,750	.....	3,423	400	1,150	1,866	5,658,329	5,595,500	.....	50
Colorado River.....	6,393,944	316,975	.....	.....	.....	26,500	7,300	87,642	9,350,175	6,214,883	3,047,756	62,829
Fort Apache.....	9,667,150	14,560	.....	.....	.....	2,950	1,075	10,535	14,470	14,470	.....	87,536
Havasupai.....	29,030	6,315	.....	.....	.....	2,250	600	5,465	126,748	105,359	19,805	1,582
Kalabab.....	133,061	940,255	.....	41	.....	3,250	15,750	941,214	812,081	812,340	691	.....
Leupp.....	2,878,024	1,037,000	.....	.....	.....	48,000	20,000	970,000	1,841,026	1,841,000	.....	26
Mogul.....	16,027,024	3,184,077	1,686,900	.....	7,805	47,000	65,000	3,402,575	12,843,617	5,842,694	7,500,000	923
Nevado.....	3,596,183	2,109,475	1,767,440	.....	.....	26,600	34,000	1,488,950	1,456,708	1,356,373	100,000	335
Pima.....	1,454,305	955,355	.....	.....	.....	20,500	6,000	127,315	4,088,960	484,450	14,500	.....
Salt River.....	3,729,134	180,007	.....	.....	.....	20,500	6,000	163,507	3,539,127	2,648,340	778,082	111,855
San Carlos.....	5,227,571	2,444,057	587,237	.....	.....	135,000	115,000	1,636,820	2,783,514	2,783,514	.....	70,527
Salis.....	1,049,068	25,500	.....	.....	.....	2,500	2,800	20,200	1,022,568	824,780	128,261	70,527
Truxton Canon.....	2,774,161	838,520	.....	.....	.....	6,600	11,200	820,700	1,935,641	1,935,641	.....	.....
Western Navajo.....	11,962,276	7,155,144	3,601,022	2,215,000	136,077	311,445	154,426	737,175	4,827,162	3,849,983	946,584	20,595
California.....	327,660	327,660	280,200	.....	866	13,000	9,000	74,984	69,613	69,418	200	.....
Bishop.....	112,443	42,825	9,000	.....	.....	7,045	3,750	32,000	5,233	5,235	.....	.....
Campo.....	17,610	12,375	.....	.....	.....	2,500	1,125	16,968	26,072	26,072	.....	72
Digger.....	324,204	299,162	220,250	40,000	6,147	9,900	9,000	50,000	144,297	144,000	25,000	277
Fort Bidwell.....	1,628,080	1,604,000	.....	.....	.....	2,000	2,000	15,800	17,000	17,000	.....	2,160
Fort Yuma.....	1,578,354	1,559,104	801,320	300,000	112,634	137,800	65,500	151,800	584,000	180,000	425,000	.....
Green Valley.....	2,598,492	2,002,492	118,000	1,800,000	7,442	20,900	5,000	40,000	2,740,896	2,740,896	1,000	.....
Hoopla Valley.....	2,842,770	2,102,175	7,664	.....	.....	20,900	25,000	47,226	2,746,876	2,746,876	.....	.....
Malik.....	330,888	83,968	.....	.....	.....	15,550	9,860	50,000	.....	.....	.....	.....

Round Valley.....	881,595	842,018	610,558	75,000	4,948	46,000	6,700	98,802	39,577	320	12,228	27,029
Soboba.....	573,886	145,260	.....	.....	.....	26,750	8,450	110,000	428,605	401,450	27,156	.....
Tule River.....	580,107	56,000	.....	.....	1,040	9,000	1,500	44,460	524,107	67,000	456,000	1,107
Colorado.....	2,561,555	522,292	140,540	1,800	277,092	19,000	11,000	72,860	2,039,264	512,050	.....	1,527,214
Southern Ute.....	1,336,966	326,034	140,540	1,800	109,134	17,000	11,000	46,580	1,010,962	.....	.....	1,010,962
Ute Mountain.....	1,294,660	196,253	.....	.....	167,953	2,000	.....	26,300	1,028,402	512,050	.....	516,352
Florida: Seminole.....	123,421	11,675	.....	.....	.....	.....	.....	11,675	111,746	111,746	.....	.....
Idaho.....	17,817,649	14,601,440	12,847,414	211,760	251,448	375,250	207,700	797,868	3,126,309	1,511,216	1,421,401	198,592
Coeur d'Alene.....	2,716,988	2,523,904	1,909,060	176,760	84,404	160,000	45,000	148,586	193,054	59,202	23,661	110,201
Fort Hall.....	5,467,001	4,150,344	2,627,583	27,052	27,052	88,000	32,000	275,400	1,346,657	761,614	522,740	32,308
Fort Lapwai.....	9,603,780	8,017,292	7,310,466	35,000	146,985	127,260	124,700	273,888	1,566,458	600,400	845,000	51,088
Iowa: Sac and Fox.....	788,038	56,097	.....	.....	21,177	21,200	3,500	10,220	731,941	368,788	15,000	333,153
Kansas.....	4,783,837	4,518,798	3,202,388	.....	211,536	265,894	141,500	667,550	265,039	.....	.....	265,039
Haskell Institute.....	8,306	8,306	.....	.....	8,306	.....	.....	.....	.....	.....	.....	.....
Kickapoo.....	2,243,531	2,130,702	1,321,405	.....	124,710	139,524	109,500	415,560	112,539	.....	.....	112,539
Potawatomi.....	2,532,000	2,379,780	1,860,960	.....	78,530	136,300	32,000	251,960	152,210	.....	.....	152,210
Michigan: Mackinac.....	428,431	427,306	165,536	48,671	28,511	120,000	35,000	29,588	1,125	.....	.....	1,125
Minnesota.....	13,212,495	9,656,448	6,065,585	206,750	798,968	1,650,650	307,140	597,355	8,556,047	1,472,757	800,316	6,282,974
Fond du Lac.....	987,812	455,501	308,000	5,000	71,201	35,000	9,000	27,300	532,311	45,000	7,000	532,311
Grand Portage.....	383,444	130,038	73,120	35,000	2,743	16,000	6,700	27,445	223,436	.....	.....	168,436
Leech Lake.....	2,292,568	1,292,568	712,506	28,750	704,190	420,000	17,500	47,005	862,555	.....	.....	862,555
Nett Lake.....	1,119,946	803,356	625,132	126,000	739,374	6,750	2,200	3,900	316,560	.....	.....	265,560
Pipestone (Birch Cooley).....	82,962	82,962	57,000	.....	16,352	5,900	740	2,370	3,215,024	1,366,507	708,716	1,060,801
Red Lake.....	3,603,776	368,752	30,342	.....	30,342	98,000	71,000	186,410	3,406,131	26,250	600	3,376,281
White Earth.....	9,772,049	6,366,918	4,317,227	12,000	434,766	1,075,000	200,000	326,925	27,894,467	18,765,821	7,268,074	1,860,572
Montana.....	55,042,705	27,158,238	17,265,826	627,000	924,302	689,800	520,600	7,190,710	27,894,467	18,765,821	7,268,074	1,860,572
Blackfeet.....	10,756,206	7,199,642	2,652,100	.....	21,917	200,000	65,000	4,260,625	3,556,564	2,506,965	992,585	54,994
Crow.....	12,705,119	5,964,525	4,635,866	2,000	264,279	135,000	117,000	829,850	6,722,850	5,247,173	917,775	558,646
Flathead.....	12,599,783	5,568,452	3,575,100	626,000	7,268,452	166,000	118,000	816,200	7,030,983	2,012,083	4,140,000	877,860
Fort Belknap.....	6,846,781	2,151,187	10,587	.....	10,587	28,000	24,000	142,600	6,633,964	6,266,770	3,800,264	6,460
Fort Peck.....	7,847,459	7,511,467	6,342,730	.....	308,837	80,000	145,000	639,900	335,992	.....	.....	335,992
Rocky Boy's Agency.....	361,265	24,875	6,800	.....	6,800	5,800	3,600	15,475	336,330	326,400	.....	9,930
Tongue River.....	3,921,200	653,790	75,000	.....	46,280	75,000	47,500	485,060	3,267,410	2,403,400	857,450	6,460

* Overestimated last year.
 † School reserve.
 ‡ Includes Liberty bonds.
 § Vermilion Lake school reserve.

TABLE 37.—*Value of Indians' individual and tribal property, June 30, 1919—Continued.*

States and superintendencies.	Total individual and tribal property.	Individual.						Tribal.				
		Total.	Lands exclusive of timber.	Timber.	Funds in hands of banks and superintendents.	Homes, furniture, barns, etc.	Wagons, implements, meats, etc.	Stock, poultry, and other property.	Total.	Lands exclusive of timber.	Timber and stock.	Balance of funds in Treasury.
Nebraska.....	\$15,459,564	\$14,970,727	\$12,808,065	.....	\$683,740	\$955,500	\$262,000	\$260,792	\$468,837	\$321,567	.....	\$167,270
Omaha.....	10,851,345	10,476,525	9,000,000	.....	200,000	870,000	240,000	166,325	375,000	300,000	.....	75,000
Winnebago.....	4,008,219	4,404,402	3,808,066	.....	1,683,740	85,500	22,000	94,467	113,817	21,567	.....	92,250
Nevada.....	2,883,215	1,265,188	812,080	.....	20,916	69,790	45,000	317,402	1,588,087	1,905,325	\$98,360	14,342
Fallen.....	168,408	140,408	112,600	.....	.....	10,000	3,300	14,508	18,000	18,000	.....	.....
Fort McDermitt.....	64,197	55,619	35,680	.....	264	5,000	4,000	10,385	8,578	8,240	.....	338
Mojave River.....	164,820	164,820	165,000	.....	.....	3,220	1,000	5,600	.....	.....	.....	.....
Nevada.....	703,067	30,360	.....	.....	.....	6,280	2,200	21,680	672,707	639,500	30,000	3,207
Walker River.....	576,880	391,063	347,575	.....	388	4,790	2,000	36,315	185,822	185,065	35,460	4,267
Western Shoshone.....	989,714	236,874	.....	.....	12,000	14,500	17,500	182,874	702,820	686,580	2,900	6,560
Reno, special agent.....	245,889	.....	161,375	.....	8,264	26,000	15,000	35,300	.....	.....	.....	.....
New Mexico.....	23,354,202	0,789,488	879,343	\$1,150,152	23,198	643,750	218,250	3,874,905	10,564,714	11,288,174	5,042,249	284,291
Headrights.....	2,158,987	1,618,188	316,883	\$1,150,152	10,584	10,260	11,260	119,119	540,809	171,441	157,319	213,049
Mescalero.....	5,520,657	1,174,147	.....	.....	12,614	28,000	16,000	117,382	5,363,510	619,800	4,717,350	15,360
Pueblo Bonito.....	3,073,978	1,194,500	562,500	.....	.....	.....	.....	682,000	1,875,000	1,875,000	3,360	1,118
Pueblo Day Schools.....	4,987,104	1,701,248	.....	.....	.....	420,500	98,000	1,272,748	3,205,880	3,182,136	78,720	3,205
San Juan.....	5,951,289	1,403,625	.....	.....	.....	15,000	33,000	1,355,625	4,577,764	4,204,000	68,000	6,764
Zuni.....	1,916,077	1,007,780	.....	.....	.....	170,000	60,000	377,780	1,306,267	1,386,797	22,500	.....
New York: New York Agency.....	4,501,121	397	.....	.....	397	(¹)	(¹)	(¹)	4,500,794	4,442,850	.....	58,374
North Carolina: Cherokee.....	965,620	185,020	.....	.....	22,840	71,980	6,250	84,550	780,000	588,000	192,000	.....
North Dakota.....	25,194,625	23,541,179	19,462,820	.....	1,162,448	705,000	380,000	1,830,902	1,633,440	698,108	.....	945,343
Fort Berthold.....	4,268,883	3,249,152	1,594,263	.....	725,854	308,000	220,000	574,925	908,851	698,103	.....	211,748
Fort Totten.....	1,480,489	1,400,000	1,213,369	.....	69,466	70,000	70,000	59,346	1,356,685	1,408	.....	1,408
Standing Rock.....	15,789,353	12,027,611	13,665,207	.....	271,446	1,187,000	445,000	948,781	741,789	741,789	.....	741,789
Turtle Mountain.....	5,685,800	2,685,362	3,160,000	.....	94,492	146,000	45,000	287,860	.....	448	.....	.....

Oklahoma.....	371, 205, 500	240, 985, 857	203, 162, 787	72, 000	20, 722, 147	10, 848, 412	3, 372, 525	2, 807, 986	30, 222, 643	12, 880, 816	10, 861, 827
Cantonment.....	2, 188, 110	2, 185, 655	1, 871, 246	.....	54, 460	100, 000	75, 000	84, 949	2, 435	.....	2, 435
Cheyenne and Arap- aho.....	5, 511, 141	4, 914, 519	4, 266, 080	.....	106, 185	176, 362	55, 450	268, 492	596, 622	.....	596, 622
Five Civilized Tribes.....	201, 586, 035	182, 187, 450	157, 940, 980	.....	16, 746, 470	5, 500, 000	1, 500, 000	268, 492	19, 388, 615	13, 830, 795	5, 658, 819
Kiowa.....	19, 658, 144	17, 005, 981	13, 919, 010	.....	1, 541, 971	5, 870, 000	415, 000	260, 000	2, 647, 163	.....	2, 647, 163
Ojawa.....	8, 23, 221, 335	10, 986, 304	9, 986, 304	.....	1, 541, 971	2, 648, 000	1, 031, 450	1, 031, 450	7, 088, 474	.....	7, 088, 474
Otoe.....	2, 125, 411	2, 072, 481	1, 619, 904	72, 000	136, 521	94, 800	64, 356	84, 356	53, 080	6, 480	46, 550
Pawnee.....	2, 003, 468	2, 075, 233	1, 668, 304	.....	65, 577	740, 000	29, 000	72, 352	28, 233	.....	28, 233
Ponca.....	5, 203, 995	5, 083, 392	4, 685, 902	.....	103, 102	197, 000	56, 500	71, 790	110, 573	8, 000	102, 573
Sac and Fox.....	1, 614, 078	1, 275, 706	888, 952	.....	116, 525	166, 000	25, 000	114, 789	338, 312	.....	338, 312
Seneca.....	2, 225, 431	2, 225, 167	1, 865, 010	.....	117, 367	108, 250	27, 225	47, 315	6, 794	.....	6, 794
Seger.....	3, 070, 438	2, 460, 579	130, 785	.....	130, 785	243, 500	76, 000	143, 780	2, 108	6, 540	2, 108
Shawnee.....	2, 205, 810	2, 208, 708	2, 085, 968	.....	44, 968	26, 000	17, 000	81, 448	.....	.....	.....
Oregon.....	39, 042, 121	8, 989, 072	5, 140, 757	1, 943, 100	389, 426	287, 500	101, 000	1, 197, 260	30, 053, 049	1, 856, 088	314, 061
Klamath.....	27, 066, 783	3, 943, 391	868, 675	1, 878, 200	222, 966	133, 000	38, 000	802, 580	23, 153, 392	602, 333	135, 029
Silet.....	7, 722, 354	484, 829	391, 900	19, 000	38, 109	9, 000	5, 000	21, 880	237, 715	12, 800	29, 946
Umatilla.....	4, 166, 017	3, 744, 222	3, 270, 600	8, 400	50, 682	108, 500	28, 000	278, 040	421, 795	24, 960	29, 946
Warm Springs.....	7, 056, 737	816, 630	609, 582	37, 500	27, 698	17, 000	30, 000	94, 860	6, 240, 107	985, 975	145, 545
South Dakota.....	59, 499, 157	52, 833, 757	43, 514, 335	59, 000	2, 401, 256	1, 391, 465	446, 810	4, 905, 861	6, 605, 480	2, 009, 419	4, 448, 135
Canton Asylum.....	1, 498	1, 498	.....	.....	1, 498	353, 100	80, 500	608, 054	2, 837, 491	1, 347, 980	1, 498, 945
Cheyenne River.....	11, 082, 715	8, 245, 224	7, 029, 012	.....	173, 958	126, 000	7, 000	441, 500	70, 248	.....	70, 248
Crow Creek.....	3, 280, 113	3, 216, 865	2, 504, 820	.....	84, 546	20, 000	10, 258	10, 258	1, 083	.....	1, 083
Flandreau.....	123, 941	122, 258	84, 000	.....	1, 000	20, 000	15, 000	262, 805	177, 265	76, 000	56, 145
Lower Brule.....	2, 245, 606	2, 086, 351	1, 662, 770	9, 000	38, 976	50, 000	66, 310	1, 486, 190	1, 249, 439	565, 439	561, 790
Pine Ridge.....	15, 735, 264	14, 489, 985	12, 280, 540	50, 000	449, 875	133, 000	38, 000	1, 577, 600	1, 940, 283	102, 200	1, 940, 283
Rosebud.....	13, 523, 413	11, 573, 210	9, 240, 779	.....	611, 831	105, 000	95, 000	1, 577, 600	1, 940, 283	.....	1, 940, 283
Sisseton.....	8, 421, 118	7, 173, 600	3, 313, 600	.....	392, 981	245, 375	85, 000	156, 250	1, 940, 283	.....	1, 940, 283
Yankton.....	5, 079, 399	4, 946, 180	3, 398, 754	.....	716, 902	365, 100	85, 000	392, 104	131, 289	.....	131, 289
Utah.....	5, 372, 731	3, 397, 862	2, 067, 229	.....	144, 956	98, 900	61, 700	1, 026, 107	1, 974, 539	519, 420	1, 414, 544
Goshute.....	67, 634	14, 000	.....	.....	.....	1, 500	500	12, 000	53, 094	46, 020	1, 014
Shoshone.....	18, 220	7, 000	.....	.....	.....	2, 200	1, 200	3, 000	11, 220	11, 000	1, 014
Ute and Ouray.....	5, 286, 877	3, 370, 292	2, 067, 229	.....	144, 956	98, 900	61, 700	1, 026, 107	1, 974, 539	462, 400	1, 413, 310

† Includes Liberty bonds.
 ‡ Does not include estimate of oil and gas, \$850,000,000.
 § Includes Liberty bonds.
 ¶ 1918 report.
 * Does not include estimate of oil and gas, \$850,000,000.
 † Includes Liberty bonds.

TABLE 37.—*Value of Indians' individual and tribal property, June 30, 1919—Continued.*

States and superintendencies.	Total individual and tribal property.	Individual.					Tribal.					
		Total.	Lands exclusive of timber.	Timber.	Funds in hands of superintendents.	Homes, furniture, barns, etc.	Wagons, implements, etc.	Stock, poultry and other property.	Total.	Lands exclusive of timber.	Timber and stock.	Balance of funds in Treasury.
Washington.....	\$48,724,993	\$31,068,439	\$23,892,124	\$3,926,809	\$982,809	\$520,984	\$670,485	\$1,075,228	\$17,656,554	\$5,738,330	\$11,589,390	\$333,834
Colville.....	12,920,027	10,884,357	8,883,370	400,000	204,502	243,092	593,200	500,223	2,035,670	851,003	1,025,507	158,560
Cushman.....	672,466	582,520	411,665	62,000	59,278	22,472	9,190	27,915	80,946	.....	.....	89,946
Neah Bay.....	385,904	98,547	17,000	4,000	871	31,850	4,775	40,051	297,357	23,357	275,000	.....
Spokane.....	2,843,385	1,559,672	863,445	523,440	19,837	65,000	18,500	69,450	1,264,223	1165,296	1,090,500	28,427
Tulokah.....	10,851,991	1,620,933	327,484	1,227,566	4,678	43,900	8,500	8,808	9,830,758	3,010,827	6,319,908	23
Tulship.....	4,398,547	4,387,840	2,586,194	1,174,673	399,179	114,700	26,320	106,774	10,707	.....	.....	10,707
Yakima.....	16,542,483	11,934,570	10,802,966	545,130	284,464	(1)	(1)	322,010	4,607,863	1,688,247	2,878,475	46,171
Wisconsin.....	22,554,997	7,811,162	3,573,159	152,097	1,611,620	1,276,060	206,000	992,226	14,753,835	6,308,712	6,406,394	2,043,729
Grand Rapids.....	616,992	542,892	380,420	2,800	78,907	28,000	13,000	44,765	74,100	.....	.....	74,100
Hayward.....	812,856	811,556	597,500	66,000	62,446	41,000	7,000	37,910	13,631,431	1,000	.....	.....
Keshena.....	14,551,621	920,190	.....	.....	191,461	150,000	37,000	541,720	.....	5,853,800	5,962,558	1,815,073
Lac du Flambeau.....	.....	679,978	333,994	29,297	20,012	214,000	32,000	20,675	.....	102,069	23,886	153,403
Laona.....	413,309	149,701	.....	.....	56,490	40,560	7,500	45,145	283,608	263,608	.....	.....
La Pointe.....	3,022,504	2,518,633	800,767	14,000	1,172,336	340,000	76,500	115,080	503,871	88,215	420,000	656
Onelda.....	1,895,575	1,894,575	1,312,158	.....	3,737	396,000	25,000	158,680	.....	.....	.....	497
Red Cliff.....	293,337	.....	1,128,320	40,000	16,225	72,500	8,000	28,292	.....	.....	.....	.....
Wyoming: Shoshone.....	4,222,447	1,492,466	829,086	.....	90,000	24,000	43,000	506,380	2,729,981	1,610,249	1,113,722	6,000

* Overestimated last year.

* No data.

TABLE 38.—*School and agency employees in Indian Service, for fiscal year ended June 30, 1919.*

States and superintendencies.	Total.				Male.		Female.	
	Em- ployees.	Indi- ans.	Non- Indi- ans.	Salaries.	Num- ber.	Salary.	Num- ber.	Salary.
Grand total.....	5,267	2,263	3,004	\$3,685,986	3,220	\$2,439,876	2,047	\$1,246,110
Totalschools.....	2,742	907	1,835	1,982,754	1,164	973,487	1,578	909,267
Total agencies.....	2,525	1,356	1,169	1,703,232	2,056	1,466,389	469	336,843
Arizona.....	720	329	391	478,395	430	308,104	290	170,291
Camp Verde schools.....	8	4	4	5,060	5	3,400	3	1,660
Colorado River School.....	8	2	6	6,660	3	3,420	5	3,240
Colorado River Agency.....	18	9	9	14,440	14	10,780	4	3,660
Fort Apache schools.....	34	13	21	21,866	15	11,720	19	10,146
Fort Apache Agency.....	44	22	22	30,844	42	29,704	2	1,140
Fort Mojave School.....	18	7	11	12,160	6	4,880	12	7,280
Havasupai School.....	5	3	2	3,620	3	2,600	2	1,020
Kalbab School.....	6	1	5	3,880	3	2,390	3	1,500
Leupp School.....	12	6	6	8,420	4	3,800	8	4,620
Leupp Agency.....	19	13	6	11,088	18	10,368	1	720
Moqui schools.....	41	21	20	24,240	16	11,390	25	12,850
Moqui Agency.....	31	15	16	20,393	22	15,683	9	4,710
Navajo schools.....	67	34	33	41,930	19	15,360	48	26,570
Navajo Agency.....	49	33	16	29,148	44	26,148	5	3,000
Phoenix School.....	79	21	58	58,500	33	27,680	46	30,820
Pima School.....	43	13	30	28,325	19	16,805	24	11,520
Pima Agency.....	45	26	19	31,648	37	25,108	8	6,540
Rice Station School.....	24	8	16	15,780	12	7,740	12	8,020
Salt River schools.....	6	2	4	4,165	2	2,170	4	1,995
Salt River Agency.....	14	7	7	8,620	13	8,020	1	600
San Carlos School.....	12	5	7	7,270	2	1,900	10	5,370
San Carlos Agency.....	41	30	11	26,728	38	23,908	3	2,820
Sells schools.....	13	1	12	8,540	5	5,120	8	3,420
Sells Agency.....	20	12	8	11,532	17	9,612	3	1,920
Truxton Canon School.....	13	4	9	9,330	4	3,840	9	5,490
Truxton Canon Agency.....	7	1	6	5,840	4	4,520	2	1,320
Western Navajo schools.....	23	6	17	16,490	11	9,080	12	6,780
Western Navajo Agency.....	20	10	10	11,928	18	10,368	2	1,560
California.....	301	109	192	198,599	182	128,949	119	69,650
Bishop schools.....	10	.....	10	6,240	5	4,320	5	1,920
Bishop Agency.....	7	4	3	3,780	6	3,060	1	720
Campo School.....	7	3	4	4,450	4	2,900	3	1,550
Digger Agency.....	2	.....	2	1,720	1	1,000	1	720
Fort Bidwell School.....	14	3	11	9,180	6	4,800	8	4,380
Fort Bidwell Agency.....	6	1	5	4,560	6	4,560	.....	.....
Fort Yuma schools.....	22	9	13	14,860	8	5,920	14	8,940
Fort Yuma Agency.....	10	5	5	5,690	8	4,340	2	1,320
Greenville School.....	20	6	14	14,780	10	9,500	10	5,280
Hoopa Valley School.....	18	8	10	11,050	7	5,610	11	5,440
Hoopa Valley Agency.....	25	17	8	18,408	20	15,108	5	3,300
Malki School.....	1	.....	1	1,400	1	1,400	.....	.....
Malki Agency.....	18	12	6	7,868	16	6,568	2	1,300
Pala schools.....	9	1	8	5,880	3	2,940	6	2,920
Pala Agency.....	15	11	4	7,968	14	7,248	1	720
Round Valley schools.....	8	.....	8	6,440	4	4,220	4	2,220
Round Valley Agency.....	9	5	4	6,240	8	5,460	1	780
Sherman Institute.....	63	9	54	47,260	27	23,190	36	24,070
Soboba schools.....	5	.....	5	3,840	3	3,240	2	600
Soboba Agency.....	19	14	5	9,336	19	9,336	.....	.....
Tule River schools.....	13	1	12	7,699	6	4,229	7	3,470
Colorado.....	46	11	35	32,950	31	24,700	15	8,250
Southern Ute schools.....	12	.....	12	8,140	5	4,660	7	3,480
Southern Ute Agency.....	16	6	10	10,960	12	8,820	4	2,340
Ute Mountain School.....	3	.....	3	2,690	1	1,700	2	990
Ute Mountain Agency.....	15	5	10	11,160	13	9,720	2	1,440
Florida: Seminole.....	3	1	2	41,100	3	4,100	.....	.....
Idaho.....	106	28	68	79,842	74	59,722	32	23,120
Coeur d'Alene schools.....	5	.....	5	3,540	3	2,520	2	1,020
Coeur d'Alene Agency.....	17	9	8	12,174	15	10,734	2	1,440
Fort Hall schools.....	19	4	15	14,120	9	8,000	10	6,120
Fort Hall Agency.....	23	13	10	15,128	22	14,128	1	1,000
Fort Lapwal School.....	27	6	21	20,640	11	11,060	16	9,580
Fort Lapwal Agency.....	15	6	9	14,240	14	13,280	1	960

TABLE 38.—*School and agency employees in Indian Service, for fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Total.				Male.		Female.	
	Em- ployees.	Indi- ans.	Non- Indi- ans.	Salaries.	Num- ber.	Salary.	Num- ber.	Salary.
Iowa: Sac and Fox Sanatorium ..	24	9	15	\$16,310	13	\$19,379	11	\$6,940
Kansas	86	23	63	69,780	49	36,190	37	33,590
Haskell Institute	68	11	57	57,170	39	28,140	29	29,030
Kickapoo School	16	12	4	6,110	8	6,110	8	4,560
Potawatomi Agency	2	.....	2	1,940	2	1,940	.....	.....
Michigan	43	18	25	29,890	21	17,060	22	12,830
Mackinac Agency	5	1	4	4,920	4	4,200	1	720
Mount Pleasant School	38	17	21	24,970	17	12,860	21	12,110
Minnesota	267	157	110	173,525	164	113,655	103	59,870
Cass Lake School	9	6	3	4,720	4	2,680	5	2,040
Fond du Lac schools	1	.....	1	1,600	1	1,600	.....	.....
Fond du Lac Agency	14	9	5	8,960	8	5,700	6	3,260
Grand Portage School	8	6	2	5,000	5	3,330	3	1,670
Leech Lake School	12	5	7	8,500	5	4,680	7	2,820
Leech Lake Agency	40	21	19	29,794	37	27,794	3	2,000
Nett Lake School	2	1	1	1,020	.....	.....	2	1,020
Nett Lake Agency	10	5	5	5,160	9	4,560	1	606
Pipestone School	26	7	19	17,630	12	9,570	14	8,060
Red Lake schools	25	18	7	14,970	11	8,040	14	6,930
Red Lake Agency	35	27	8	23,251	27	18,361	8	4,890
Vermilion Lake School	15	6	9	9,840	8	5,020	7	4,820
White Earth schools	41	26	15	24,630	15	8,940	26	15,690
White Earth Agency	29	20	9	18,720	22	13,380	7	5,340
Mississippi: Union Day School ..	1	.....	1	720	.....	.....	1	720
Montana	360	192	168	249,965	265	188,861	95	61,104
Blackfeet schools	20	10	10	11,780	7	5,040	12	6,740
Blackfeet Agency	49	28	21	31,588	39	24,368	10	7,220
Crow schools	21	5	16	15,180	8	7,080	13	8,100
Crow Agency	59	35	24	39,956	52	34,936	7	5,020
Flathead School	2	.....	2	3,200	2	3,200	.....	.....
Flathead Agency	30	14	25	32,279	32	26,319	7	5,960
Fort Belknap schools	13	5	8	9,100	6	5,380	7	3,720
Fort Belknap Agency	34	20	14	22,908	31	20,388	3	2,520
Fort Peck schools	21	9	12	14,104	7	6,560	14	7,544
Fort Peck Agency	39	28	11	25,428	36	23,328	3	2,100
Rocky Boy's Agency	6	2	4	3,804	6	3,804	.....	.....
Tongue River schools	17	11	6	12,540	4	4,500	13	8,040
Tongue River Agency	40	26	15	28,098	35	23,958	5	4,140
Nebraska	79	30	49	58,390	39	31,700	40	26,690
Genoa School	42	14	28	29,470	17	13,740	25	15,730
Omaha School	16	4	6	8,300	7	6,680	3	1,620
Winnebago School	27	12	15	20,620	15	11,280	12	9,340
Nevada	132	53	79	83,759	72	51,544	60	32,215
Carson School	44	16	28	29,180	15	13,780	29	15,400
Fallon schools	12	4	8	6,945	8	5,000	4	1,945
Fort McDermitt School	7	.....	7	4,945	4	3,265	3	1,680
Fort McDermitt Agency	4	3	1	1,509	3	789	1	720
Moapa River School	7	3	4	3,732	4	2,052	3	1,680
Nevada schools	6	3	3	3,940	2	1,900	4	2,040
Nevada Agency	12	7	5	6,464	10	5,144	2	1,320
Reno Agency	2	.....	2	2,120	1	1,400	1	720
Walker River School	4	.....	4	3,250	2	2,000	2	1,250
Walker River Agency	11	5	6	6,944	10	6,224	1	728
Western Shoshone schools	6	2	4	4,280	2	2,100	4	2,160
Western Shoshone Agency	17	10	7	10,470	11	7,890	6	2,580
New Mexico	434	207	227	281,725	256	177,979	178	108,746
Albuquerque School	43	12	31	31,020	22	17,490	21	13,530
Jicarilla School	16	7	9	11,600	6	5,900	10	5,600
Jicarilla Agency	52	29	23	33,410	46	30,210	6	3,200
Mescalero School	12	6	6	8,220	8	5,296	4	2,924
Mescalero Agency	39	23	16	22,900	33	19,060	6	3,840

TABLE 38.—*School and agency employees in Indian Service, for fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Total.				Male.		Female.	
	Em- ployees.	Indi- ans.	Non- Indi- ans.	Salaries.	Num- ber.	Salary.	Num- ber.	Salary.
New Mexico—Continued.								
Pueblo Bonito schools.....	24	7	17	\$15,100	7	\$6,520	17	\$8,580
Pueblo Bonito Agency.....	18	10	8	12,620	14	9,860	4	2,760
Pueblo Day Schools.....	50	20	30	31,329	8	7,635	42	23,694
Pueblo Day Schools agency.....	45	25	20	30,524	33	22,584	12	7,940
San Juan schools.....	24	10	14	16,710	10	9,080	14	7,630
San Juan Agency.....	20	32	7	20,264	37	18,944	2	1,320
Santa Fe School.....	39	13	26	26,160	16	12,800	23	13,360
Zuni schools.....	21	9	12	13,048	7	5,740	14	7,308
Zuni Agency.....	12	4	8	8,920	9	6,880	3	2,040
New York Agency.....	3		3	2,250	2	1,650	1	600
North Carolina.....	36	14	22	23,000	20	14,420	16	8,580
Cherokee schools.....	30	11	19	18,940	15	11,080	15	7,860
Cherokee Agency.....	6	3	3	4,080	5	3,340	1	720
North Dakota.....	263	159	104	156,980	166	103,839	97	52,991
Bismarck School.....	13	7	6	8,880	6	5,300	7	3,580
Fort Berthold schools.....	5	1	4	4,100	2	2,750	3	1,350
Fort Berthold Agency.....	22	22	10	19,548	29	16,848	3	2,700
Fort Totten schools.....	41	19	22	24,850	15	10,440	26	13,910
Fort Totten Agency.....	11	5	6	7,440	9	6,080	2	1,360
Standing Rock schools.....	40	21	19	25,078	14	11,585	26	13,491
Standing Rock Agency.....	65	53	12	32,568	54	27,588	11	6,006
Turtle Mountain schools.....	9	1	8	5,780	5	4,680	4	1,200
Turtle Mountain Agency.....	23	18	5	11,748	19	9,428	4	2,320
Wahpeton School.....	24	12	12	16,420	13	9,360	11	7,060
Oklahoma.....	925	281	644	781,430	522	503,871	403	277,559
Cantonment School.....	12	3	9	7,800	5	4,080	7	3,720
Cantonment Agency.....	12	3	9	9,840	12	9,840		
Cheyenne and Arapaho School.....	19	8	11	12,080	8	6,340	11	5,740
Cheyenne and Arapaho Agency.....	19	11	8	14,160	14	10,780	5	3,380
Chilocco School.....	58	19	39	42,480	30	25,140	28	17,340
Choctaw-Chickasaw Sanita- rium.....	14	1	13	9,500	6	4,560	8	4,940
Kiowa schools.....	72	16	56	46,040	31	24,246	41	21,794
Kiowa Agency.....	64	34	30	42,966	47	33,426	17	9,540
Oahe School.....	27	12	15	21,150	10	10,780	17	10,370
Oahe Agency.....	45	12	33	64,190	36	56,290	9	7,900
Otoe School.....	12	1	11	8,080	4	3,300	8	4,780
Otoe Agency.....	7	2	5	4,800	6	4,080	1	720
Pawnee School.....	16	6	10	11,360	7	6,290	9	5,070
Pawnee Agency.....	11	3	8	8,950	9	7,330	2	1,620
Seger schools.....	17	6	11	10,700	6	4,820	11	5,880
Seger Agency.....	17	10	7	9,740	14	8,080	3	1,660
Seneca School.....	17	6	11	12,470	9	7,400	8	5,070
Seneca Agency.....	10	5	5	8,660	3	5,860	7	2,800
Shawnee School.....	20	10	10	12,580	7	5,560	13	7,020
Shawnee Agency.....	8	5	3	5,040	7	4,440	1	600
Five Civilized Tribes Agency.....	280	90	190	308,482	198	215,952	91	92,530
Five Civilized Tribes schools..	150	18	141	110,362	53	45,320	106	65,042
Schools-Supervisor.....	12	4	8	14,220	7	8,950	5	5,270
Armstrong Academy.....	17	3	14	11,190	7	5,520	10	5,670
Bloomfield Seminary.....	14		14	9,210	1	720	13	8,490
Cherokee Training.....	14	2	12	9,750	2	2,100	12	7,650
Euclaw Boarding.....	14		14	9,277	6	4,570	8	4,707
Euclaw Boarding.....	14		14	9,125	2	1,080	12	8,065
Jones Academy.....	14	1	13	9,720	9	6,900	5	2,820
Mekuskey Academy.....	15		15	9,630	6	5,940	9	3,690
Nuyaka Boarding.....	15	4	11	9,495	7	5,280	8	4,215
Tusahoma Academy.....	15	2	13	9,360	4	3,120	11	6,240
Wheelock Academy.....	15	2	13	9,375	2	1,140	13	8,235

TABLE 38.—*School and agency employees in Indian Service, for fiscal year ended June 30, 1919—Continued.*

States and superintendencies.	Total.				Male.		Female.	
	Em- ployees.	Indi- ans.	Non- Indi- ans.	Salaries.	Num- ber.	Salary.	Num- ber.	Salary.
Oregon.....	194	69	125	\$153,106	123	\$107,306	71	\$45,800
Klamath schools.....	20	2	18	13,850	9	8,280	11	5,570
Klamath Agency.....	46	16	30	43,380	40	37,140	6	6,240
Salem School.....	55	17	38	39,510	21	18,340	34	21,170
Siletz schools.....	10	6	4	9,080	8	7,470	2	1,620
Umatilla School.....	5	2	3	4,500	2	2,340	3	2,160
Umatilla Agency.....	16	9	7	15,104	13	12,644	3	2,460
Warm Springs schools.....	17	7	10	10,740	9	6,700	8	4,040
Warm Springs Agency.....	25	10	15	16,932	21	14,392	4	2,540
South Dakota.....	680	319	361	411,786	428	271,392	252	140,394
Canton Asylum.....	26	.....	26	15,630	12	9,380	14	6,250
Cheyenne River schools.....	20	6	14	14,790	8	7,600	12	7,190
Cheyenne River Agency.....	58	38	20	31,668	50	27,108	8	4,560
Crow Creek School.....	13	5	8	9,200	6	5,340	7	3,860
Crow Creek Agency.....	32	22	10	19,788	25	15,108	7	4,680
Flandreau School.....	42	15	27	29,080	19	16,280	23	12,770
Hope School.....	9	1	8	6,120	2	900	7	5,220
Lower Brule School.....	11	3	8	8,380	6	5,700	5	2,680
Lower Brule Agency.....	18	9	9	11,964	17	11,084	1	900
Pierre School.....	25	5	20	17,380	10	7,920	15	9,460
Pine Ridge schools.....	78	23	55	48,400	33	27,966	45	20,434
Pine Ridge Agency.....	102	82	20	49,256	96	44,816	6	4,440
Rapid City School.....	33	8	25	21,610	12	10,080	21	11,530
Rosebud schools.....	65	8	57	41,080	22	18,190	43	22,890
Rosebud Agency.....	80	62	18	40,280	66	31,900	14	8,380
Sisseton schools.....	21	5	16	14,330	12	9,550	9	4,780
Sisseton Agency.....	15	8	7	9,980	10	7,440	5	2,540
Yankton School.....	15	10	5	10,080	8	6,220	7	3,860
Yankton Agency.....	19	9	10	12,860	14	8,840	5	4,020
Utah.....	60	23	37	42,144	44	33,164	16	8,980
Goshute School.....	6	1	5	3,480	4	2,880	2	800
Shivwits School.....	6	2	4	3,244	5	2,744	1	500
Uintah and Ouray School.....	12	3	9	9,700	3	4,300	9	5,400
Uintah and Ouray Agency.....	36	17	19	25,720	32	23,240	4	2,480
Washington.....	231	93	138	165,543	146	119,153	85	46,390
Colville schools.....	11	3	8	8,350	6	6,590	5	1,760
Colville Agency.....	36	16	20	30,448	31	25,808	5	4,640
Cushman schools.....	37	8	29	28,080	19	16,840	18	11,240
Cushman Agency.....	7	3	4	5,260	7	5,260	.....	.....
Neah Bay schools.....	7	5	2	4,370	4	2,420	3	1,950
Neah Bay Agency.....	4	4	.....	1,740	3	1,020	1	720
Spokane schools.....	7	2	5	4,560	4	3,660	3	900
Spokane Agency.....	23	9	14	14,688	20	12,968	3	1,70
Taholah School.....	13	9	4	9,444	12	8,844	1	600
Tulalip schools.....	23	8	15	17,580	8	7,780	15	9,800
Tulalip Agency.....	20	8	12	7,699	3	4,229	17	3,470
Yakima School.....	14	7	7	9,960	5	4,650	9	5,310
Yakima Agency.....	29	11	18	23,324	24	19,064	5	4,260
Wisconsin.....	208	99	109	144,322	120	93,842	88	50,480
Grand Rapids School.....	4	.....	4	4,340	4	4,340	.....	.....
Hayward schools.....	28	12	16	18,450	14	10,220	14	8,230
Hayward Agency.....	9	6	3	5,040	8	4,380	1	660
Keshena schools.....	19	8	11	14,606	9	9,060	10	5,545
Keshena Agency.....	35	25	10	21,458	27	16,798	8	4,660
Lac du Flambeau School.....	18	11	7	12,580	7	6,040	11	6,540
Lac du Flambeau Agency.....	11	5	6	8,004	8	5,844	3	2,160
Laona Agency.....	6	1	5	5,620	4	3,940	2	1,680
La Pointe School.....	14	5	9	13,610	13	12,890	1	720
Onesida School.....	24	15	9	14,070	9	6,730	15	7,340
Red Cliff School.....	3	.....	3	2,375	1	1,400	2	975
Red Cliff Agency.....	8	4	4	4,980	7	4,280	1	720
Tomah School.....	29	7	22	19,190	9	7,940	20	11,250
Wyoming.....	65	29	36	47,525	50	38,205	15	9,320
Shoshone schools.....	19	3	16	14,580	7	7,880	12	6,680
Shoshone Agency.....	46	26	20	32,965	43	30,325	3	2,640

TABLE 39.—*Miscellaneous field employees, June 30, 1919.*

Designation.	Total.		Chief officer.		Others.	
	Num-ber.	Salary.	Num-ber.	Salary.	Num-ber.	Salary.
<i>Field investigating and supervising force.</i>						
Total.....	128	\$207,280	16	\$35,400	112	\$171,880
Inspection.....	7	18,500	1	3,500	6	15,000
Supervisors of schools.....	8	17,400	1	3,000	7	14,400
Special supervisors.....	13	26,700			13	26,700
Liquor.....	23	31,980	1	2,500	22	29,480
Construction.....	8	14,500			8	14,500
Health.....	23	32,500	1	3,000	22	29,500
Industries:						
Farming.....	2	5,400	1	3,600	1	1,800
Employment.....	3	3,700	1	2,000	2	1,700
Live stock.....	1	(¹)	1	(¹)		
Forestry:						
Field supervising officers.....	10	18,850	1	3,500	9	15,350
Menominee.....	19	21,080	1	1,800	18	19,280
Special agents.....	6	8,020	2	3,800	4	4,220
Attorney for Pueblo Indians.....	1	1,500	1	1,500		
Travelling auditors.....	4	7,200	4	7,200		
<i>Field irrigation service.</i>						
Total.....	206	283,730	13	26,500	193	257,230
Chief inspector.....	1	4,000	1	4,000		
Superintendents of irrigation.....	7	17,250	1	2,500	6	14,750
Arizona.....	5	4,500	2	2,700	3	1,800
Pima.....	4	3,800	1	1,500	3	1,800
Salt River.....	1	1,200	1	1,200		
California: Miscellaneous work.....	54	74,320	1	2,000	53	72,320
Idaho: Fort Hall.....	13	15,780	1	1,800	12	13,980
Montana: Billings.....	15	18,940	1	1,800	14	17,140
New Mexico: Albuquerque.....	17	24,980	1	2,000	16	22,980
South Dakota: Pine Ridge.....	1	1,800	1	1,800		
Utah.....	32	40,100	2	3,800	30	36,300
Salt Lake.....	11	15,160	1	1,800	10	13,360
Uintah.....	21	24,940	1	2,000	20	22,940
Washington: Yakima.....	44	61,780	1	2,100	43	59,680
Wyoming: Shoshone.....	17	20,300	1	2,000	16	18,300
<i>Field allotment service.</i>						
Total.....	18	17,940	4	5,760	14	12,180
Special allotting agent.....	1	(²)	1	(²)		
Arizona:						
Leupp.....	1	720			1	720
Navajo.....	1	1,800	1	1,800		
Pima.....	2	1,980			2	1,980
California: Hoopa Valley.....	4	4,080	1	1,800	3	2,280
Montana: Crow.....	1	450			1	450
North Dakota: Turtle Mountain.....	1	900			1	900
Oregon: Umatilla.....	5	5,960	1	2,160	4	3,800
South Dakota: Pine Ridge.....	2	2,100			2	2,100
<i>Heirship work.</i>						
Examiners.....	55	61,310	18	32,800	37	29,010

¹ \$10 a day when actually employed.

² \$8 a day when actually employed.

TABLE 39.—*Miscellaneous field employees. June 30, 1919—Continued.*

Designation.	Total.		Chief officer.		Others.	
	Num- ber.	Salary.	Num- ber.	Salary.	Num- ber.	Salary.
<i>Probate work.</i>						
Attorneys.....	22	\$55,000	22	\$35,000		
<i>Warehouses.</i>						
Total.....	38	37,210	3	6,200	35	\$31,010
Chicago.....	20	20,900	1	2,200	19	18,700
San Francisco.....	6	6,995	1	2,000	5	4,995
St. Louis.....	12	9,225	1	2,000	11	7,225

TABLE 40.—*Recapitulation of all Indian Service employees.*

Designation.	Number.	Salaries.
Total.....	5,994	\$4,668,196
School.....	12,742	1,982,754
Agency.....	12,525	1,703,212
Field investigating and supervising force.....	128	207,280
Irrigation service.....	206	283,730
Adtlement service.....	18	17,940
Heirship work.....	55	61,810
Probate work.....	22	55,000
Warehouses.....	35	37,210
Indian Office employees, exclusive of commissioner and assistant commissioner.....	260	339,240

¹ School and agency includes 2,263 Indians earning \$1,101,620.

TABLE 41.—*Commissioner's account for fiscal year ended June 30, 1919.*

[Checks, drafts, and other instruments of exchange, drawn to the order of the commissioner, are received in the office as deposits with bids for tribal leasing privileges, guaranties for right of way across Indian lands, and for various other purposes. For such receipts the commissioner renders monthly accounts as required by sec. 3622, Rev. Stats.]

On hand July 1, 1918.....	\$21,670.28
Received:	
July, 1918.....	\$23,301.88
August, 1918.....	19,533.52
September, 1918.....	2,227.08
October, 1918.....	1,103.40
November, 1918.....	23,476.97
December, 1918.....	225.36
January, 1919.....	100.15
February, 1919.....	54,060.80
March, 1919.....	40,463.90
April, 1919.....	1,735.30
May, 1919.....	63,603.86
June, 1919.....	1,211.43
	233,933.55
Total on hand and received.....	255,603.83
Disbursed and deposited:	
July, 1918.....	19,181.15
August, 1918.....	29,555.37
September, 1918.....	2,816.05
October, 1918.....	3,147.14
November, 1918.....	6,788.53
December, 1918.....	20,890.24
January, 1919.....	590.65
February, 1919.....	317.66
March, 1919.....	6,540.98
April, 1919.....	83,663.62
May, 1919.....	73,238.12
June, 1919.....	4,440.51
	250,169.96
Balance on hand June 30, 1919.....	5,433.87

TABLE 42.—Receipts and disbursements on account of sales of Indian lands from July 1, 1918, to June 30, 1919.

Title of fund.	Date of acts or treaties.	Statutes at Large.		On hand July 1, 1918.	Received.	Disbursed.	On hand June 30, 1919.
		Vol.	Page.				
Apache, Kiowa, and Comanche 4 per cent fund.....	Mar. 27, 1908	35	49		\$193,913.33	\$406,364.03	\$1,900,433.02
	June 1, 1906	34	213				
Cheyenne and Arapaho in Oklahoma 3 per cent fund.....	June 25, 1906	34	530				237,363.85
	June 17, 1910	36	533		25,756.96		
Chippewas in Minnesota fund.....	Jan. 14, 1889	25	642				
	Feb. 29, 1896	29	417		192,754.81	132,175.00	5,860,540.29
	June 27, 1902	32	400				
	June 25, 1906	36	460				
Cheyenne River Reservation 3 per cent fund.....	June 21, 1910	36	602	1,185,912.35	107,392.73	28,024.36	1,265,280.72
Coeur d'Alene 3 per cent fund.....	June 21, 1910	34	335	99,788.08	2,080.75	15,821.54	86,567.29
Fort Berthold Reservation 3 per cent fund.....	June 1, 1910	36	458	214,254.94	177,796.38	218,232.47	173,768.86
Fort Peck Reservation 4 per cent fund.....	May 30, 1908	35	569	418,530.70	193,681.71	418,017.07	214,686.37
Kiowa Agency Hospital 4 per cent fund.....	June 30, 1913	38	92	92,003.14	11,127.47	13,761.94	86,978.67
	June 15, 1870	16	362				
Osage fund.....	May 19, 1872	17	90		83.34	147,057.09	4,667,968.06
	June 16, 1880	21	262	4,814,962.40			
	Aug. 19, 1880	26	344				
Pine Ridge Reservation 3 per cent fund.....	May 27, 1910	36	443	105,629.26	16,763.78		122,563.04
Rosebud Reservation 3 per cent fund.....	May 30, 1910	36	451	478,516.41	31,063.96	187,900.74	321,704.53
Round Valley general fund.....	Oct. 1, 1890	26	638		17,784.47		27,218.02
	Mar. 3, 1891	26	1006	9,433.55			
Standing Rock Reservation 3 per cent fund.....	May 28, 1908	35	460	481,921.19	90,886.61	153,021.77	419,896.03
Umatilla general fund.....	Feb. 14, 1913	37	343	128,836.53	2,190.08	8,025.38	123,001.22
Ute, Confederated Bands of, 4 per cent fund.....	Mar. 3, 1885	23	934	2,436,162.07	30,782.38	480,906.07	1,986,028.38
	Mar. 4, 1913	37	934				
Proceeds of—							
Colville Reservation, Wash.....	Mar. 22, 1906	33	352	64,532.38	21,066.80		85,619.18
Crow ceded lands, Montana.....	Apr. 27, 1904	33	319	422,136.87	85,187.61	216,187.16	289,136.32
Devils Lake Reservation, N. Dak.....	do.....	33	319	2,451.48	517.64	2,107.39	861.73
Flathead Reservation, Mont.....	Apr. 21, 1904	33	305	240,547.78	56,120.72	31,879.43	261,786.07
Irrigable land, Yuma Reservation, Calif.....	Apr. 21, 1904	33	224	1,820.33	5,421.31		7,241.64
Lower Brule Reservation, S. Dak.....	Apr. 21, 1906	34	125	3,000.43	81.54		3,101.97
Red Lake Reservation, Minn.....	Feb. 20, 1904	33	50	137,669.92	12,485.98	138,972.51	6,213.39
Rosebud Reservation, S. Dak.....	Apr. 23, 1904	33	258	24,584.86	10,069.52	14,864.20	19,790.18
Siletz Reservation, Oreg.....	Mar. 2, 1907	34	1230	36,066.38	11,579.59	36,056.33	11,579.59
Southern Ute Reservation, Colo.....	May 30, 1910	36	678	155,423.11	2,802.55	897.16	157,328.50
Spokane Reservation, Wash.....	Feb. 20, 1895	28	367	26,803.91	3,552.25	1,929.40	28,426.76
Town lots, White Earth Reservation, Minn.....	May 29, 1908	35	458				
	Mar. 1, 1907	34	1032	9,565.99	45.00		9,610.99

TABLE 42.—Receipts and disbursements on account of sales of Indian lands from July 1, 1918, to June 30, 1919—Continued.

Title of fund.	Date of acts or treaties.	Statutes at Large.		On hand July 1, 1918.	Received.	Disbursed.	On hand June 30, 1919.
		Vol.	Page.				
Proceeds of—Continued.							
Town site, Colorado River Reservation, Ariz.....	Apr. 30, 1908	35	77	\$55,013.92	\$2,029.61	.....	\$57,043.53
Utah and White River Ute lands.....	May 27, 1902	32	263	196,186.75	15,588.97	\$3,964.90	209,820.83
Wind River Reservation, Wyo.....	Mar. 3, 1905	33	1069	5,780.77	10,183.09	.....	15,963.80
Indian moneys, proceeds of labor:	do.....	33	1016				
Chickasaw, town lots.....	Mar. 3, 1883	22	590		866.10	190.00	965.10
	Mar. 2, 1887	24	463				
Chickasaw, unallotted lands.....	Apr. 26, 1906	34	143	864,148.86	592,830.71	11,406,985.31	49,994.26
	Mar. 3, 1911	36	1070				
Choctaw, unallotted lands.....	do.....	34	143	1,944,051.74	1,778,673.15	3,578,322.09	144,401.80
	Mar. 3, 1883	22	590				
Choctaw, town lots.....	Mar. 2, 1887	24	463	67,389.73	2,598.29	67,959.72	2,028.30
	do.....	24	463				
Creek, town lots.....	Apr. 26, 1906	34	143	146,052.58	799.00	146,062.58	799.00
Creek, unallotted lands.....	Mar. 3, 1911	36	1070	149,700.73	32,866.25	179,041.26	3,525.73
	do.....	34	143				
Cherokee, unallotted lands.....	do.....	36	1070		723.50	.....	723.50
	do.....	34	143				
Seminole, unallotted lands.....	do.....	36	1070				
Total.....		36	1070	23,161,738.18	3,740,869.06	1,821.20	18,866,037.54

\$232,500 deposited in Oklahoma banks.

\$660,505 deposited in Oklahoma banks.

TABLE 43.—*Liabilities of the United States to Indian tribes under treaty stipulations, June 30, 1913.*

Name of tribes.	Description of annuities, etc.	Number of installments yet unappropriated, explanations, etc.	Statutes.	Annual amount needed to meet stipulations.
Choctaw.....	Permanent annuities.....	(Art. 2, treaty of Nov. 16, 1865, \$3,000..... Art. 13, treaty of Oct. 13, 1820, \$400..... Art. 2, treaty of Jan. 20, 1825, \$6,000.....	Vol. 7, p. 99..... Vol. 11, p. 614..... (Vol. 7, pp. 213, 223..... Vol. 7, pp. 212, 226, 614..... Vol. 26, p. 1029.....	\$3,000
Do.....	Provisions for smiths, etc.....	Art. 6, treaty of Oct. 18, 1820..... Art. 9, treaty of Jan. 20, 1825..... Art. 11 of agreement of Mar. 26, 1867, ratified by act of Mar. 3, 1861.....	Vol. 7, pp. 212, 226, 614..... Vol. 26, p. 1029.....	920
Coeur d'Alene.....	Employees.....	Art. 3, treaty of Mar. 19, 1867..... Art. 10, Treaty of May 7, 1868..... Art. 6, Treaty of July 25, 1868..... Estimated.....	Vol. 16, p. 720..... Vol. 15, p. 632..... Vol. 15, p. 667..... Vol. 19, p. 256; vol. 15, p. 653.....	3,000
Chippewa of the Mississippi.....	For schools, during the pleasure of the President.....	.....	.....	4,000
Crow.....	Physician, carpenter, miller, engineer, farmer, blacksmith, etc.....	.....	.....	5,500
Navajo.....	For support of schools.....	.....	.....	100,000
Northern Cheyenne and Arapaho.....	Subsistence and civilization, per agreement of Feb. 28, 1877, and for pay of 2 teachers, 2 carpenters, 2 farmers, miller, blacksmith, engineer, and physician, per agreement of May 10, 1868.....	.....	.....	80,000
Pawnee.....	Annuity in cash.....	.....	.....	30,000
Do.....	Support of 2 manual-labor schools and pay of teachers.....	.....	.....	10,000
Do.....	Iron, steel, and other articles for shops, 2 blacksmiths, 1 of whom is to be tin and gun smith, 2 strikers and apprentices, 2 teachers, etc.....	.....	.....	500
Do.....	Pay of physician.....	.....	.....	5,400
Do.....	For education, smith, farmer, and smith shop during the pleasure of the President.....	.....	.....	1,200
Quapaw.....	Permanent annuities.....	.....	.....	1,500
Seneca of New York.....	.....	.....	.....	6,000
Shoshoni and Bannock:	.....	.....	.....	5,000
Shoshoni.....	Physician, carpenter, teacher, engineer, farmer, and blacksmith.....	.....	.....	1,000
Do.....	Blacksmith, and for iron and steel for shops.....	.....	.....	5,000
Bannock.....	Physician, carpenter, miller, teacher, engineer, farmer, and blacksmith.....	.....	.....	5,000
Six Nations, of New York.....	Permanent annuities in clothing, etc.....	.....	.....	4,500
Sioux of different tribes, including Santee Sioux of Nebraska.....	Blacksmith, and for iron and steel.....	.....	.....	1,600
Do.....	Physician, 5 teachers, carpenter, miller, engineer, farmer, and blacksmith.....	.....	.....	10,400
Do.....	Purchase of rations, etc., as per art. 5, agreement of Sept. 26, 1876, and for support and maintenance of day and industrial school among the Sioux Indians, including the erection and repairs of school buildings.....	.....	.....	400,000
Spokane.....	Pay of blacksmith and carpenter.....	.....	.....	1,000

TABLE 43.—*Liabilities of the United States to Indian tribes under treaty stipulations, June 30, 1919—Continued.*

Name of tribes.	Description of annuities, etc.	Number of installments yet unappropriated, explanations, etc.	Statutes.	Annual amount needed to meet stipulations.
Tabasquache, Mosche, Capote, Wiminuche, Yampa, Grand River, and Uintah Bands of Utes.	For iron and steel and necessary tools for blacksmith shop.....	Estimated, art. 9, treaty of Mar. 2, 1868....	Vol. 15, p. 631....	\$250
Do.....	2 carpenters, 2 millers, 2 farmers, 2 blacksmiths, and 2 teachers.....	Estimated, art. 15, treaty of Mar. 2, 1868....	Vol. 15, p. 632....	8,390
Do.....	Annual amount to be expended under the direction of the Secretary of the Interior in supplying beef, mutton, wheat, flour, beans, etc.	Art. 12, treaty of Mar. 2, 1868.....	do.....	30,000
				724,860

TABLE 44.—*Pro rata shares of tribal funds settled during fiscal year ended June 30, 1919.*

States and superintendencies.	Tribes.	Indians paid.	Average pro rata share.	Amount paid.
Total.....		2,947		\$996,828.93
Idaho: Coeur d'Alene.....	Coeur d'Alene.....	37	\$339.98	12,579.26
Iowa: Sac and Fox.....	Sac and Fox.....	12	1,067.75	12,813.09
Kansas.....		30		9,760.93
Kikapoo.....	Kikapoo.....	11	567.34	6,240.79
Potawatomi.....	Potawatomi.....	19	185.27	3,520.14
Montana: Flathead.....	Confederated Flathead.....	238	107.28	25,532.64
Nebraska: Santee.....	Ponca.....	2	65.63	131.36
New York: New York.....	Tonawanda (Seneca).....	16	154.75	2,476.00
North Dakota: Standing Rock.....	Sioux.....	96	145.40	13,958.40
Oklahoma.....		1,194		704,424.14
Cantonment.....	Cheyenne and Arapaho.....	12	292.32	3,507.87
Cheyenne and Arapaho.....	do.....	197	299.35	57,001.95
Seger.....	do.....	11	299.35	3,182.85
Kiowa ¹	Apache, Kiowa, and Comanche.....	151	291.59	44,031.35
Do ²	do.....	284	692.64	196,709.76
Osage.....	Osage.....	59	3,819.76	163,610.67
Otoe.....	Oto and Missouri.....	136	630.29	85,719.79
Pawnee.....	Pawnee.....	315	415.50	130,984.30
Ponca.....	Ponca.....	9	47.53	420.47
Sac and Fox.....	Sac and Fox.....	20	967.25	19,345.13
Oregon.....		79		15,381.67
Klamath.....	Klamath.....	48	187.66	9,007.74
Umatilla.....	Umatilla.....	31	205.61	6,373.93
Douth Dakota.....		1,185		193,817.74
Cheyenne River ¹	Sioux.....	75	111.28	8,346.00
Do ²	do.....	43	248.14	10,670.02
Crow Creek.....	do.....	80	165.87	13,269.68
Lower Brule.....	do.....	1	138.81	138.81
Pine Ridge.....	do.....	96	112.33	10,783.68
Rosebud.....	do.....	436	118.60	51,710.40
Sisseton.....	Sisseton and Wahpeton.....	151	232.56	35,117.65
Yankton.....	Sioux.....	303	210.50	63,781.50
Wisconsin: Keshena.....	Menominee.....	58	102.65	5,953.70

¹ 5 per cent.² 4 per cent.³ 3 per cent.

TABLE 45.—*Volume of business in Indian warehouses, fiscal year ended June 30, 1919.*

Warehouses.	Freight shipments.			Express shipments.		
	Number.	Weight.	Value.	Number.	Weight.	Value.
		<i>Pounds.</i>			<i>Pounds.</i>	
Chicago.....	91,646	11,139,478	\$1,119,963.73	710	27,544	\$8,836.58
San Francisco.....	42,220	5,166,716	293,000.64	51	1,089	432.66
St. Louis.....	19,146	1,799,887	341,965.49	208	5,099	1,907.98
Total.....	153,012	18,106,081	1,754,929.86	969	33,732	11,176.61

Warehouses.	Packages mailed.			Percentage of increase or decrease of totals over previous year.		
	Number.	Weight.	Value.	Number.	Weight.	Value.
		<i>Pounds.</i>		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Chicago.....	4,346	14,719	\$19,052.75	30.2	25.5	1.85
San Francisco.....	436	918	983.78	20.4	29.9	29.2
St. Louis.....	2,265	5,854	4,835.53	32.4	41.6	17.3
Total.....	7,047	21,491	24,872.06	23.6	28.7	8.85

	Chicago.	San Francisco.	St. Louis.	Total.
Total number of shipments (packages).....	96,702	42,707	21,619	161,028
Total weight (pounds).....	11,241,741	5,168,723	1,810,840	18,221,304
Total value.....	\$1,147,853.06	\$294,416.47	\$348,709.00	\$1,790,978.53

1 Exclusive of coal, which was not handled through the warehouse.

2 Increase.

3 Decrease.

TABLE 46.—*Expense at warehouses, fiscal year ended June 30, 1919.*

Warehouses.	Rent.	Light and fuel.	Employees and inspection of supplies.	Miscellaneous.	Cost of maintenance.		
					Total.	Per cent.	Per cent, 1918.
Chicago.....	\$4,800.00	\$369.70	\$18,272.88	\$4,119.83	\$27,562.41	2.40	2.38
San Francisco.....	2,400.00	13.05	7,470.64	1,472.10	11,355.79	3.85	2.54
St. Louis.....	2,368.33	396.23	13,843.02	1,825.57	18,433.15	5.29	3.66
Total.....	9,568.33	778.98	39,586.54	7,417.50	57,351.35	3.20	.....
Total, 1918.....					52,837.61	2.68
Saving over 1918.....					4,513.74	

REPORT OF THE BOARD OF INDIAN COMMISSIONERS

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BOARD OF INDIAN COMMISSIONERS.

MERRILL E. GATES, Washington, D. C. ; appointed June 27, 1884. .
GEORGE VAUX, Jr., Philadelphia, Pa. ; appointed November 27, 1906.
WARREN K. MOOREHEAD, Andover, Mass. ; appointed December 19, 1908.
SAMUEL A. ELIOT, Boston, Mass. ; appointed November 27, 1909.
FRANK KNOX, Manchester, N. H. ; appointed May 2, 1911.
WILLIAM H. KETCHAM, Washington, D. C. ; appointed December 3, 1912.
DANIEL SMILEY, Mohonk Lake, N. Y. ; appointed December 17, 1912.
ISIDORE B. DOCKWEILER, Los Angeles, Calif. ; appointed December 22, 1913.
MALCOLM McDOWELL, Chicago, Ill. ; appointed May 23, 1917.
HUGH L. SCOTT, Princeton, N. J. ; appointed February 25, 1919.

GEORGE VAUX, Jr., *Chairman.*

MALCOLM McDOWELL, *Secretary.*

FIFTIETH ANNUAL REPORT BOARD OF INDIAN COMMISSIONERS.

FISCAL YEAR ENDED JUNE 30, 1919.

SEPTEMBER 1, 1919.

SIR: We beg leave to submit herewith the Fiftieth Annual Report of the United States Board of Indian Commissioners for the fiscal year ended June 30, 1919, with certain recommendations and observations for your consideration.

During the year members of the board visited and inspected over 30 reservations, schools, and other branches of the Indian Bureau, and their reports on conditions among the Indians and of perplexing and serious problems confronting the Indian Office and its field forces were transmitted to you from time to time. Among the reservations and schools visited by board members were the following:

Sac and Fox Agency, Iowa.

Wind River Reservation, Wyo.

Crow, Tongue River, Fort Belknap, Blackfeet, and Flathead Reservations, Mont.

Shawnee Agency, Okla.

Schools and hospitals among the Choctaws, Chickasaws, Cherokees, Creeks, and Seminoles in Oklahoma.

Papago, Moqui, Navajo, and Western Navajo Reservations, Ariz.

San Juan, Pueblo Bonito, Zuni, and Pueblo Day Schools Agencies, N. Mex.

Eastern Cherokee Reservation, N. C.

Seminole Agency, Fla.

Kickapoo and Potawatomi Agencies, Kans.

Nonreservation schools: Phoenix, at Phoenix, Ariz.; Santa Fe, at Santa Fe, N. Mex.; Albuquerque, at Albuquerque, N. Mex.; Haskell Institute, at Lawrence, Kans.; Mount Pleasant, at Mount Pleasant, Mich.

BOARD'S SEMICENTENNIAL.

We may be pardoned for calling your attention to the fact that this, its Fiftieth Annual Report, marks the semicentennial of the Board of Indian Commissioners, which was created under an act of Congress by President Grant in 1869. During the 50 years which span the board's existence the Indians have advanced along the lines of civilization to a remarkable degree. When it is considered that the administration of Indian affairs, from the beginning, has been changed, more or less, every few years; that the Indians, from the time they were made wards of the Government, have suffered much from the Government's shifting policies; that organized exploitation and individual graft have robbed, harassed, and, in some cases, utterly ruined them (and this is not our unsupported statement for Secretaries of the Interior, Commissioners of Indian Affairs, Members of Congress, Army officers, missionaries, Indian superintendents,

and Indian Office inspectors, for years, have gone on record in this matter); that they have been the victims of much Federal official inefficiency, of harmful congressional legislation, of white man prejudice, of race antagonism, of white man lust and greed, it is little short of the marvelous that they have attained that degree of civilization which is theirs to-day.

Thousands of Indians have become full citizens of their home States and the United States, and a large proportion have proved themselves capable of bearing citizenship responsibilities and of properly using citizenship privileges. There are thousands more of these native Americans who undoubtedly are ready to-day for citizenship, and every proper effort should be put forth to make them full citizens.

There are thousands of Indians, however, who have not advanced far enough to warrant the withdrawal of the Nation's guardianship, and it is these Indians in whom the board is peculiarly interested and for whom it will go as far as it may go in cooperation with you, the Commissioner of Indian Affairs, Congress, and any public or private body to accelerate the progress of such Indians toward the realization of the hope and the consummation of the plans of all disinterested friends of the Indian—in full American citizenship for all Indians.

LAW AND ORDER.

It is entirely in this spirit of helpfulness that the board again puts forward for consideration, as one of the outstanding needs of the time in the administration of Indian affairs, the enactment of Federal legislation which will subject Indians and other persons on Indian reservations to State marriage, health, educational, and criminal laws. In its last annual report the board stressed the alarming increase of unrestrained immorality among a large number of Indians. The field work of its members during the year has strengthened the board's conviction that the enforcement of law and moral order on reservations is an immediate necessity, and that unless this urgent need is promptly met by Federal legislation, with adequate means for administration, much of the constructive work of the Indian Office and missionaries will be greatly impaired if not entirely destroyed.

Years ago, before the Indians began to discard the blanket and moccasin for the more convenient clothing of the white man, the two races were so far apart that Indian marriages and divorces were regarded as customs of an alien people. But year by year the two races have been coming closer and closer together. Indian reservations no longer are isolated areas on the wild frontier. Instead, with few exceptions, they are important communities in sections thickly settled by white people. Thousands of Indian children attend public schools with white children; and Indians and their white neighbors now have much to do with each other in almost every phase of community and family life. We have knowledge of no reservation where the Indians are so remote from white centers of population, so backward in civilization, that we can be justified in condoning open immoral practices simply by regarding them as unmoral tribal customs. The points of contact between Indians and whites are too many and

too intimate to further sanction what is practically open adultery within Indian reservations.

And yet that is exactly what the Government is sanctioning today, for the department has ruled that in cases of noncitizen Indians, living in tribal relations, mere separation for the purpose of terminating the marriage relations constitutes a tribal divorce and is recognized as valid whether the marriage was by Indian custom or legal ceremony. This ruling was made by the department on a case submitted by the Indian Office in connection with the probate of an Indian estate, and was justified by the total lack of congressional legislation relating to such cases.

In a letter under date of January 15, 1919, to the Hon. Charles D. Carter, then chairman of the House Committee on Indian Affairs, in connection with a measure designed to put a stop to tribal marriages and divorces, you presented the situation aptly and convincingly as follows:

Many reports of superintendents and investigating officials and others show an urgent need of legislation to regulate the marriage relations of the Indians and to remedy the existing prevalent social evils therein enumerated. For many years the Government has tolerated conditions because of the Indians being uncivilized, and it was not believed expedient to thrust upon them too soon the laws and principles of our Nation with reference to these matters. But conditions have changed. Indian Service officials, Indian-school teachers, church missionaries, and others have been teaching the Indians—old and young—for years, so that most of the present generation are aware of the fact that they are expected to adopt the habits and customs of civilization in regard to marriage, etc.

Comparatively little trouble is now experienced with the older generation of Indians, as they are generally settled in their marital relations. The greatest difficulty is now experienced with certain Indians who know what is expected of them, but who also know that the present laws are inadequate to punish them, and who willfully commit many acts which come within the list of generally acknowledged crimes named in said draft, thereby wronging others, exerting a demoralizing influence, and retarding the advancement of the civilization of their race. Many of this class of men cohabit with an Indian girl for a short time, then leave her for another, and so on, as it suits their capricious desires. Until remedial legislation has been secured it seems the race will be dragged down by immorality and degenerateness, and their industrial, economic, and moral progress postponed and even set back.

For many years Indian-custom marriage and divorce among Indians has been recognized, but this special privilege should now be abolished and the Indian placed on the same footing in this respect as other persons to whom the law now applies, both ignorant and well informed, educated and uneducated. While this proposed legislation provides for the abolishment of the Indian-custom marriage and divorce, it also protects the interests of those who have in good faith consummated such marriage prior to the passage of the act.

The determination of the heirs of Indians has been complicated because of the difficulty resulting from Indians marrying and being divorced by Indian custom. The sooner this special privilege is abolished, the sooner will this difficulty be diminished.

It is believed that the proposed legislation is urgently needed for the welfare of the Indians and the suppression of immorality, and it is respectfully suggested and recommended that the proposed legislation be enacted into law during the present session of Congress, if practicable.

A draft of a bill whose provisions, if enacted into law, would enable the Indian Office through its reservation executives to prosecute offenders, both white and Indians, against the moral laws in reservations, was prepared by the board and submitted for your consideration, and you approved its principles and general provisions. Subsequently bills of like import were introduced in Congress and there

now are before the Senate and House committees measures designed to spread the State marriage, health, educational, and criminal laws over reservations. We earnestly suggest that every proper means be employed to secure the enactment of legislation which will carry into effect the recommendations contained in your letter quoted above.

HEROIC INDIAN SERVICE EMPLOYEES.

The influenza epidemic of 1918 and 1919 which attacked over 24 per cent of the Indian population, resulting in over 6,000 deaths with a mortality of about 9 per cent of the number of cases, showed the stuff of which many superintendents and others of the field staff of the Indian Office were made. From every reservation and school have come reports of devotion to duty, amounting in some cases to heroism. But because of the stirring and exciting events of the war these cases have attracted but little attention. So far as statistics are available there seems to have been but little difference between the white and Indian populations in the percentage of cases and deaths. It would have caused no comment if Indians, living as most of them do under insanitary conditions and in most reservations remote from medical attention, should have shown a much higher percentage of fatality than the whites.

That they did not undoubtedly is due in a large degree to the self-sacrificing, energetic, and effective efforts of the Indian Office force in the field. Indian Service doctors, superintendents, supervisors, teachers, matrons, clerks, and other reservation employees were out in the field night and day caring for the sick and burying the dead; and all of them heartily and harmoniously cooperated with the United States Public Health Service and the State and county health officials.

Notwithstanding the heroic work of the medical staff and the low rate of mortality among the Indians the epidemic emphasized the fact that the medical division of the Indian Service is in no wise adequate for the needs of the Indians. In our last annual report reference was made to the medical service of the Indian Bureau, and it was strongly suggested that after the war the medical service should be reorganized.

In 1912 Congress appropriated \$10,000 to enable the United States Public Health Service to make a thorough examination as to the prevalence of tuberculosis, trachoma, smallpox, and other contagious and infectious diseases among the Indians of the United States. The report of Surgeon General Blue of the Public Health Service, in compliance with the provisions of this appropriation, was transmitted to the Senate and was published as Senate Document No. 1038 of the Sixty-second Congress, third session, and referred to the Senate Committee on Indian Affairs.

MEDICAL SERVICE REORGANIZATION.

The report contains, among other things, recommendations for the reorganization of the medical service of the Indian Office, among which were the following:

Medical officers should be the sanitary officers of their jurisdictions in fact as well as in name. Their written order should be enforced by agency super-

intendents, and in case of nonenforcement agency superintendents should be required to report the same to the central authority, stating the reason.

Medical officers of reservations should be under the supervision and control of a distinctly medical bureau. They should be held strictly accountable to such bureau for the administration of medical and sanitary matters on reservations, and the character of their work should be controlled by frequent inspection.

The occurrence of cases of sickness and deaths on Indian reservations should be made a matter of permanent record. A transcript of the records of cases of sickness should be transmitted regularly to the Surgeon General of the United States Public Health Service, and reports of outbreaks of certain specified diseases, such as plague, smallpox, and scarlet fever, should be made by telegraph to this official, whose duty it is, under law, to keep the State and local health authorities and the country at large informed of the prevalence of sickness and the occurrence of epidemics.

The physicians to the Indians should be so organized as to insure adequate medical and sanitary supervision on reservations and at boarding schools. Only competent men should receive appointment, and the compensation should be sufficient to retain their services. Unqualified men should not be retained. In medical and sanitary matters the authority of the medical officers should be, in large measure, independent of agency superintendents, and there should be lodged in a central bureau plenary powers in respect to all medical and sanitary matters among the Indians.

We find that the situation and conditions, so far as the medical branch of the Indian Service is concerned, have not been improved since this report of the Public Health Service was published in 1913. It is true the Great War, which took from the service many of its best men, is largely responsible for the unsatisfactory situation in which the medical service finds itself; but there are other contributory causes, such as low salaries and uninviting living conditions. We are of the opinion there can be little real improvement until the entire Indian medical service is reorganized.

We believe that all reservation physicians, nurses, hospitals, sanatoria, and specialists should be under the charge and direction of the United States Public Health Service, and that all Indian Service physicians should be public-health officers and independent of reservation superintendents; that the entering salaries of reservation physicians, which are altogether too low, should be made large enough to attract good men to the service; that every reservation physician should have enough automobiles for himself and nurses to properly cover his field; and that the nurses should be qualified in all respects and be paid salaries commensurate with their duties and responsibilities.

A good tactful doctor can do more in less time toward making full-blood Indians receptive to the educational efforts of superintendents and teachers than any other person on a reservation, for he not only cures disease, binds up wounds, and betters sanitary conditions in Indian homes but he undermines the influence of Indian medicine men, and thus solves one of the most perplexing factors in the Indian problems. Commenting on the work of the Indian agency physicians the report of the Public Health Service, referred to above, says:

The physicians conducting the work on many of the reservations see no encouragement, their life is isolated, their pay small, their chance of promotion less, and their authority to attack the real problem limited. Under such conditions it would be surprising if any, except the genius, undertook to overcome the obstacles; [and] the medical branch of the Office of Indian Affairs is hampered in curing and preventing diseases (a) because of insufficient authority in medical and sanitary matters; (b) because of existing obstacles, such as

racial characteristics, present economic status of the Indians, and varying physical conditions on reservations; (c) because of inadequate compensation, absence of reasonable expectation of promotion, lack of esprit de corps, and coordinated organization.

EFFECT OF LOW SALARIES.

Inadequate compensation for the field force of the Indian Service is lowering the standard of its personnel. The war took from the service a number of capable and efficient employees who either entered the military service or secured employment at much higher salaries and with better living conditions. A large proportion of the field force is of the class known as "temporary employees," and there is small hope of securing efficient permanent employees unless the service is made more attractive. The average pay of the field employee is altogether too low; it always has been too low. The increased cost of living is as serious a problem on reservations as it is in large cities. On most reservations employees are remote from centers of white population with few, if any, of the opportunities for social pleasures; on many reservations there is no opportunity for the children of white employees to attend public schools. In short, living conditions are far from attractive.

There seems to be an impression that any kind of a man or woman is good enough to act as the Government's agent in looking after the affairs of the Indians and educating Indian children. Again and again the charge has been made that the employees of the Indian Service are inefficient and not worth the salaries they receive. We can testify from personal observation that while there are a number of men and women in the service who are not qualified for the work intrusted to them, there are many more who are of high character and who are conscientious, earnest, and efficient executives, clerks, and instructors, and who, notwithstanding low salaries, isolated homes, and discouraging conditions, are enthusiastic in their purpose and efforts to help their Indian charges along the road toward self-help, education, and civilization.

A substantial increase in the salaries of Indian Service employees in Washington and the field not only is amply justified by economic conditions, but is necessary to hold together the Indian Office and field forces. The flat bonus of \$240 a year, granted by Congress to Federal employees of certain classes, does not meet the situation, for it is regarded as a temporary expedient. The Indian Service men and women should have the assurance of a permanent increase in their compensation; they deserve it, and we can see no sound argument against giving it to them.

Therefore, we recommend that the Congress be urged to give immediate consideration to the low salaries paid Indian Service employees, to the end that a substantial increase in their compensation be granted.

NAVAJO INDIANS.

The nonreservation Navajo Indians who live and, in common with white stockmen, occupy the public domain and railroad sections contiguous to the Navajo, Moqui, Leupp, and Zuni Reservations in Arizona and New Mexico are threatened with economic disaster. Some 6,000 men, women, and children, who were born within this area, as were their ancestors, are facing practical eviction, and, unless

immediate consideration leading to a quick decision is given the dire necessities of these self-supporting Navajo Indians, the Government of the United States in a few years must answer to another indictment for shameful neglect of a worthy people who never have asked for gratuities. This is not a new "problem"; it is not a recent development, nor is it a novel situation. The files of Congress, the Department of the Interior, the Bureau of Indian Affairs, and the Board of Indian Commissioners are burdened with petitions, reports, recommendations, letters, and telegrams from superintendents of reservations, inspectors, supervisors, and other Government officials, from missionaries, Indian traders, and white business men, urging, demanding, and praying for the Government to help these Indians toward the permanent occupancy of enough land to maintain them and give them at least a chance to make more than a bare living.

A few years ago you undertook to help this people by exchanging railroad lands within this area for other lands with the purpose of creating an Executive order reservation. But Congress, by estopping the enlargements of reservations in New Mexico and Arizona by Executive order, made it impossible for you to proceed further in the exchanging of railroad sections; and as all the railroad, the odd numbered, sections in this area are practically controlled by white lessees and owners, the Indians are being crowded out. It now seems to be a question of only a few years when these Indians will be classed with other homeless, landless Indians a charge on the State or Government, or both. There is not enough unoccupied land in the several Navajo Reservations to maintain the Indians now in them.

It seems to be agreed by those who recently have investigated the condition of these Indians, that if they can be helped to lease grazing lands for a time they later will be able not only to lease but buy sufficient lands for their flocks and herds. As a step in this direction it would be well to "block" the two classes of land, public and railroad, so that each class will form a solid township or half township; in short, to so rearrange the public domain-railroad land checkerboard that grazing units will be all of one class of land instead of being alternating sections of public and railroad lands. After the two classes of sections have been "blocked" we are confident that congressional action and departmental regulations can work out a practical plan for the ultimate ownership by the Navajo Indians of sufficient grazing lands for their needs, which would carry with it citizenship for the Indians, who then would become taxpayers. The fact that the Indians are nontaxpayers is an important part of this problem, for the citizens of New Mexico and Arizona are emphatically opposed to increasing the present large nontaxpaying land areas in those States.

We earnestly recommend your early consideration of this matter which vitally affects several thousands of men, women, and children whom the Congress has placed in your care and under your supervision.

INDIAN LABOR IN ARIZONA.

One of the most interesting developments in Indian progress is observed in Arizona where the long staple cotton fields are giving employment to a large number of Papago, Pima, and Maricopa Indians. Papago and Apache Indians also are working in the cop-

per mines and refineries, and Indians of all tribes are competing with the Mexicans as common laborers on railroads and in sawmills.

The cotton industry promises to make such a decided change in the conditions of the Papago, Pima, and Maricopa Indians that it behooves the Government to take cognizance of this probability. Over 1,000 Papago Indians left their homes last year to work in the cotton fields for several months. Approximately 300 families were represented in this body of cotton pickers. A cursory investigation of the situation which is developing in Arizona fails to disclose, as yet, any injurious effect on the Indians by reason of this change in their industrial life. Generally speaking the employers are fair with their Indian employees, paying them good wages and endeavoring to provide decent living accommodations for them. There are some exceptions to this rule; but in the main, the employment of the Indians in the cotton and alfalfa fields, mines, refineries, and sawmills has been an advantage to the Indians.

If this new industrial condition of the Indians becomes permanent, and if the employment of Indians by white men increases, it is quite probable there will have to be a readjustment in the administration of Indian affairs in Arizona so far as relates to the education of Indian children and the living conditions and reservation life of the Indians. Thus far, the employing class in Arizona seems to take a modern and progressive view of this situation; and we are confident that this is due largely to the earnest efforts of the Hon. Edward E. Ayer, who, when a member of this board, took it upon himself, for several years, to secure the helpful attention of leading employers in Arizona in behalf of the Indians.

In a report to the board on Indian labor in Arizona, Mr. Ayer said, in part:

I am advised by those in touch with the cotton situation that the various cotton growers' associations will guarantee the Indians good wages and fair treatment. What our Indians need most is to be taught to work. There are nearly 50,000 Indians in Arizona and a very small percentage of them do any useful work. It seems to me that this opportunity for obtaining remunerative labor for a large body of Indians of that section, at work which they can do, and with good pay, should be given prompt and favorable attention.

To accomplish this, in my judgment, a man should be detailed from the Indian Department to have charge of all Indians at work in the valley (Gila and Salt River); that is to look after their interests; to see that they have proper tents, water, fuel, and other conveniences, as well as proper pay and to advise them * * * this man should be sent there immediately to familiarize himself with conditions. He should put himself in communication with the different Indian agents in Arizona. * * * The man to oversee this work should spend the other seven months of the year among the different tribes of Arizona, New Mexico, and eastern California advocating the work and arranging for the coming season.

We beg to suggest that Mr. Ayer's recommendation be favorably considered by the Indian Office for we are strongly of the opinion there is danger of harmful conditions springing from this new field of Indian industry unless the Indians are protected and their interests conserved. The Indian Office has a number of men eminently qualified to do the work outlined by Mr. Ayer.

PURCHASE OF SUPPLIES.

The board was represented at the letting of contracts for Indian supplies in St. Louis and Chicago during June. Abnormal market conditions, due to the war, affected prices and bids, making it rather

difficult for the Purchasing Division of the Indian Office to award contracts. A significant feature of the annual lettings is the fact that few new bidders enter the competition for Indian Service supplies although the office notifies of the bidding large numbers of firms, in the trades and industries which might be interested, and wide publicity is secured through advertising.

While war conditions have had something to do in the last two years toward keeping down the number of new bidders, there is little doubt the main cause is the delays in making payment of invoices. These delays are common to all Government departments. The Indian Office is as prompt as any of them, but we are of the opinion that if contractors for Indian Service supplies were paid so promptly that the Government would secure the advantage of cash discounts, not only would there be more bidders and, therefore, more competition which would bring more and lower bids but there would be a substantial saving in the form of discount for cash payments.

To pay bills thus promptly it would be necessary to have ample funds in the hands of the special disbursing officers at the Indian warehouses where most of the supplies are assembled, inspected, and shipped to reservations and schools. As it is now each reservation or school has its disbursing agent to whom are allotted funds to pay for the supplies brought for his unit. The Indian Office can not use the funds allotted the Chilocco School, for instance, to pay for supplies bought for the Haskell Institute. Therefore it is necessary that the supplies for a particular unit must be received by that unit before the bill is paid. As there are many reservations and schools remote from railroads, requiring long hauls over rough roads, very often there are long and unavoidable delays in the payment of bills for supplies. These delays discourage bidders, especially new bidders who are successful in getting contracts, and the result is that every year finds the business of selling supplies to the Indian Service going to the same people.

Last year the Indian Office submitted to the House Indian Committee an item for the Indian bill, reading as follows:

For initial payment for goods and supplies purchased for the Indian Service, \$500,000 or so much thereof as may be necessary to be immediately available and to be reimbursed, by transfer through accounts of disbursing officers or otherwise, from appropriations and funds which are applicable for the various agencies, schools, and projects to which the goods and supplies are subsequently distributed: *Provided*, That the sum so reimbursed may be reexpended under the same conditions in payment for other purchases made during the fiscal year ending June 30, 1920.

We beg to recommend that an effort be made to secure a reimbursable appropriation for the purchase of supplies in the next Indian bill, for we are satisfied it is a good business proposition.

INSPECTIONS AND SURVEYS.

We beg to invite your attention to the following summary of inspections, surveys, and recommendations made by members of this board:

NAVAJO INDIANS IN ARIZONA AND NEW MEXICO (filed Mar. 7, 1919, and supplemental report filed June 2, 1919), by Commissioner McDowell, who recommended a rearrangement of the public domain

and railroad land sections contiguous to the Santa Fe Railroad right of way in Arizona and New Mexico, so that each class of land shall be blocked in townships or half townships where such rearrangement is possible, keeping in mind the ultimate securing of the public domain east and south of the Navajo, Moqui, and Leupp Reservations for the permanent use of the nonreservation Navajo Indians; that provision be made to furnish school facilities for every Navajo child; that enlarged appropriations be made for the construction and maintenance of stock wells, the drilling of artesian wells, and the development of agricultural lands in the Navajo and Hopi countries; that at least two townships of railroad lands be leased for the use of the nonreservation Navajos under the jurisdiction of the Zuni superintendency, New Mexico. (See Appendix A.)

SAC AND FOX SANITARUM AND FOX RESERVATION, IOWA (filed Apr. 1, 1919), by Commissioner Ketcham, who recommended that the immoral conditions existing on the reservation should be remedied by extending the laws of the State of Iowa over the reservation under the jurisdiction of the Federal courts. (See Appendix B.)

CROW, FLATHEAD, AND BLACKFEET RESERVATIONS, MONT. (filed Apr. 1 and 19, 1919), by Commissioner Ketcham, who recommended that the Crow Reservation be kept intact for some years, and that all children born since the allotment roll was closed be allotted before any disposition is made of any of the Crow land; that on the Flathead Reservation a contract doctor be employed in the Polson district, a sawmill be built at Polson, a flour and feed mill be placed on the reservation, and Indian parents be consulted when making land leases of minors' property; that on the Blackfeet Reservation improvements be made in the plants of the Cut Bank and Heart Butte schools and Blackfoot Sanitarium and that a white man be appointed chief of police. (See Appendices C, D, and E.)

TONGUE RIVER RESERVATION, MONT. (filed Apr. 7, 1919), by Commissioner Ketcham, who recommended that an appropriation be made to purchase 5,000 head of cattle to stock the reservation to its full capacity to take the place of the surplus Indian horses that are being sold; that the Government day schools be discontinued and the boarding schools on the reservation be enlarged to accommodate all the children of the tribe not able to attend the public schools; that improvements be made in the plant of the Busby Boarding School; that a hospital be established at Lame Deer; that the Indian medicine practices be suppressed and law and order be improved on the reservation. (See Appendix F.)

FORT BELKNAP RESERVATION, MONT. (filed Apr. 19, 1919), by Commissioner Ketcham, who recommended that an appropriation of about \$7,500 be made to build two flumes, a dam and a head gate in connection with the irrigation ditch at Big Warm Spring Creek in order to water 1,200 acres of hay land, needed to supply winter feed for the reservation cattle; that another physician be placed in the Hayes district; that a cottage be erected and other improvements be made at the reservation boarding school at Fort Belknap. (See Appendix G.)

WIND RIVER RESERVATION, WYO. (filed Apr. 19, 1919), by Commissioner Ketcham, who recommended that the day school at Arapaho be discontinued and the water supply for the St. Michael's Episcopal school be made more sanitary. (See Appendix H.)

MOUNT PLEASANT SCHOOL, MOUNT PLEASANT, MICH. (filed Apr. 1 and May 27, 1919), by Commissioners Ketcham and Eliot. Both Commissioners Eliot and Ketcham recommended the restoration of the four-year vocational course at the school, and Commissioner Eliot recommended an appropriation of \$25,000 for a new heat and power plant. (See Appendices I and J.)

SHAWNEE AGENCY, OKLA. (filed Apr. 19, 1919), by Commissioner Ketcham, who recommended that the competency of the Mexican Kickapoo Indians be determined by the department in ample time before the expiration of the trust periods of 443 of their allotments in 1919 and 1920, so that an Executive order may be issued at the dates of the expiration extending the trust periods of those Kickapoos found to be incompetent to handle their own affairs; that the claims of the Potawatomi Indians against the Government be settled as speedily as possible. (See Appendix K.)

SEMINOLE AGENCY, FLA. (filed Apr. 16, 1919), by Commissioner Eliot, who recommended that, after the extent of the grazing area of the Government reservation has been determined, a herd of 200 cows be purchased and placed on the reservation and bred up, and then that the Indians be encouraged to acquire small herds of their own. Commissioner Eliot favors the cession of the Florida State Indian Reservation to the United States Government, and recommended that the Indian Bureau refrain from too much supervision and from futile attempts to control these Indians. (See Appendix L.)

EASTERN CHEROKEE RESERVATION, N. C. (filed May 27, 1919), by Commissioner Eliot, who recommended that the corporation known as the Eastern Band of Cherokee Indians of North Carolina sell the lands it owns in Cherokee County and 3,000 acres south of the railroad at Ela and, with the proceeds added to the tribal funds, buy off the claims of the so-called "white Indians," so that the tribal rolls could be cleared up and substantiated; that the corporation should then deed all the remaining lands to the Government and dissolve as a corporation and the Government should then allot the lands in severalty and maintain the present reservation-school system, using the unallotted lands as the source of a sinking fund for the cost of maintenance. It was further recommended that the Indians form a corporation for the erection and running of a canning factory. Commissioner Eliot also recommended the purchase of additional land for the school farm, the erection of a domestic science cottage, a dormitory for small boys, and an additional ward for the reservation hospital. (See Appendix M.)

PAPAGO INDIANS, ARIZ. (filed May 31, 1919), by Commissioner McDowell, who recommended that the building of the hospital at Sells be started as soon as possible; that a boarding school of 250 capacity be erected on the reservation, and also three more day schools; that eight more deep-well pumping plants be installed for live stock and domestic purposes; that improved living quarters be furnished the irrigation employees at San Xavier; that an active campaign to eradicate trachoma among the Indians be started soon. (See Appendix N.)

ZUNI RESERVATION, N. MEX. (filed May 28, 1919), by Commissioner McDowell, who recommended that a new boarding-school building and girls dormitory be erected at Blackrock, a new day school at Zuni, and also cottages for the superintendent, physician, field

matron, and other employees. Commissioner McDowell also recommended an early exchange of railroad lands within the recent extension of the reservation. (See Appendix O.)

THE PUEBLO INDIANS OF NEW MEXICO (filed June 28, 1919), by Commissioner Vaux, who recommended that the Albuquerque day schools superintendency be divided into two jurisdictions, with superintendents located at Albuquerque and Espanola, N. Mex.; that steps be taken to improve the Government day schools and quarters for employees at the various pueblos, and that day schools be built at Ranchitos, on the Santa Ana grant; at Sia, at Chical on the Isleta grant; a new school erected at Acomita, on the Acoma grant, and increased school facilities at Santo Domingo, Encinal, Siama, and Picuris; that greater authority be granted Indian Service officials to compel school attendance; that the Acoma-Laguna irrigation ditch along the San Jose River be cemented to prevent seepage, and two storage reservoirs be built for irrigation purposes at the Taos pueblo; that a gasoline engine, thrashing machine, and small mill be furnished each pueblo; that bridges be built across the Rio Grande on the Cochiti grant near the Santo Domingo boundary, across the Rio Grande connecting Santa Clara and San Ildefonso, and across the Jemez River near the villages of Sia and Jemez; that all of the pueblos be fenced; that some sort of an agreement be made with the Forest Service so that Indians can obtain, with less difficulty, timber and firewood from adjacent forest reserves. Specific recommendations respecting various pueblos are contained in the full report, which appears as an appendix of the board's report. (See Appendix P.)

SCHOOLS AMONG THE FIVE CIVILIZED TRIBES OF OKLAHOMA (filed June 28, 1919), by Commissioner Ketcham, who recommended that the tribal schools among the Five Civilized Tribes be continued, possibly for 10 years; that Congress provide for higher education in the white schools of higher learning, either in the State in which the Indians live or elsewhere, for such children of the Five Civilized Tribes as have exhausted their local opportunities and have the desire and requisite talent to continue their studies; that all the Five Civilized Tribe schools be equipped with eight grades and some of them be made high schools, including one each of the Choctaw male and female academies; that Congress enact legislation which will insure ample educational funds for the schools of the Choctaws and Chickasaws for a period of 10 years, and in the case of the Choctaws a provision be made for a fund for educational purposes in excess of the amount expended on the Choctaw schools for the scholastic year ended June 30, 1905; that Congress enact legislation to conserve the remaining tribal moneys of the Creeks and Seminoles as educational funds, and to increase them, if possible, by whatever tribal properties there may yet remain to be disposed of and by whatever outstanding claims these tribes may have; that section 41 of the act of March 1, 1901, be amended by Congress to permit the Secretary of the Interior to make oil and gas leases on Creek lands. Specific recommendations in regard to 19 tribal and contract schools among the Five Civilized Tribes are contained in the full report as filed which appears as one of the appendices of the board's report. (See Appendix Q.)

HEALTH CONDITIONS IN OKLAHOMA (filed June 28, 1919), by Commissioner Ketcham. (See Appendix R.)

LIQUOR SUPPRESSION OFFICE, DENVER, COLO. (filed April 9, 1919),
by Commissioner Ketcham. (See Appendix S.)

MEETINGS.

The board held four meetings during the year; a special meeting at Newcastle, N. H., July 25-27, 1918; the regular semiannual meeting at Lake Mohonk, N. Y., October 23-25, 1918; the annual meeting at Washington, January 28-30, 1919; and a special meeting at Albuquerque and Santa Fe, N. Mex., April 16-18, 1919.

At the annual meeting Commissioner George Vaux, jr., of Philadelphia, Pa., was reelected chairman of the board, and Commissioner Malcolm McDowell, of Chicago, Ill., was reelected secretary, both for the ensuing year.

Mr. Edward E. Ayer, of Chicago, who was appointed a member of the board in 1912, resigned on January 29, 1919. Maj. Gen. Hugh L. Scott, United States Army, retired, was appointed a member of the commission by the President on February 25, 1919, to succeed former Commissioner Ayer.

Faithfully yours,

GEORGE VAUX, jr., *Chairman.*
MERRILL E. GATES,
WARREN K. MOOREHEAD,
SAMUEL A. ELIOT,
FRANK KNOX,
WILLIAM H. KETCHAM,
DANIEL SMILEY,
ISIDORE B. DOCKWEILER,
MALCOLM McDOWELL,
HUGH L. SCOTT.

To the SECRETARY OF THE INTERIOR.

APPENDIX A.

REPORT ON THE NAVAJO INDIANS OF ARIZONA AND NEW MEXICO, BY MALCOLM McDOWELL.

FEBRUARY 15, 1919.

SIR: I have the honor of submitting herewith a report of conditions in the Navajo country of northeast Arizona and northwest New Mexico. My investigation began September 13 and ended October 10, 1918, during which I traveled more than 800 miles through the Pueblo Bonito, Navajo, Moqui, and Western Navajo Reservations. As the Navajo country embraces some 22,000 square miles, the topography of which is so wild and rough that traveling is difficult, it would be a physical impossibility to cover the entire area within the four weeks I spent in that country, therefore it will be necessary for me to make another trip to round out my work.

The Navajo country, lying in three States, includes the superintendencies of Pueblo Bonito in New Mexico, the Navajo and San Juan in Arizona and New Mexico, the Moqui, Western Navajo, and Leupp in Arizona, and about 600,000 acres in the southern part of

Utah. It embraces parts of San Juan and McKinley Counties in New Mexico, the Navajo and Apache Counties in Arizona, part of Coconino County in Arizona, and the southern part of San Juan County in Utah.

For the purpose of administration the Navajo country is divided into the superintendencies I have mentioned, but all this area, with a population of over 32,000 Navajos, may properly be handled for the purpose of a survey as a single unit. This great area includes vast stretches of practically worthless desert lands, millions of acres covered by mountain ranges and cut and slashed by canyons, dry washes, and valleys; but a large proportion of the land, semiarid though it be, is rough grazing land which is used by the Navajo Indians for raising their sheep, goats, horses, and cattle. The Navajo country is the largest undeveloped area of land under the supervision of the Indian Office and is peopled by the largest tribe of American Indians. Although I traveled hundreds of miles through this country I saw but small parts of it and I doubt if the superintendent of any Navajo Reservation, excluding Leupp, has seen or ever will see all the land under his supervision.

The Navajos are shepherds; sheep is the economic basis of Navajo life. The sheep must be moved to find grass and water and to adjust the flocks to seasonal changes. Because of necessity the Navajo families live wide apart from each other. Their hogans, as they call their beehive-shaped habitations of logs, branches, stones, and dirt, are located with reference to convenient access to water and wood. Each family has two or more hogans which are used for summer and winter and as the demand for grass and water for their sheep compels them to move from place to place they occupy during the year their several hogans.

This family isolation, together with the nomadic habit of the Navajos and the difficulty in traveling over the country caused by mountains, canyons, quick sands, and precipitous bluffs which edge high mesas, have made it well-nigh impossible to take an accurate census of the entire Navajo people.

In 1915, under the supervision of Father Weber, Superior of the Franciscan Fathers at St. Michaels, Ariz., an accurate, scientifically planned census of the Navajo Reservation, whose seat of government is at Fort Defiance, Ariz., was made. This census was so comprehensive and complete that it offers a sound basis for estimating the entire population of the Navajo country. The best authorities agree there are over 32,000 Navajo Indians in that part of the United States and that between 7,000 and 9,000 are children of school age.

The Navajos are a prolific race; I found children in almost every hogan and families with four and five children are common. There is every evidence that the Navajos, who are over 95 per cent full bloods, are increasing in population to a degree which indicates that within a generation their country will not be able to sustain them unless the water supply for stock and domestic purposes is increased. Water is the prime essential for the economic and social development of the Navajo people.

The irrigation division of the Indian Office has done the seemingly impossible in the development of underground water for stock and domestic purposes; the lines of wells which were sunk 6 to 8

miles apart were equipped with pumps operated by windmills, and the numerous "seeps" which have been developed into real springs bear testimony to the achievements, accomplished under remarkably adverse conditions, of the staff of the irrigation division. The Indians have a saying "where water is there is no grass, where grass is there is no water." This epigram states the case completely for there are great areas of grass land in which there is no water for stock and there are good springs so far remote from grass lands that they are useless so far as the sheep are concerned.

The irrigation division with its wells has brought water to waterless grass areas and thus has greatly increased the range and this increased grazing area makes it possible for more Indians to live and sustain themselves in the Navajo country. I doubt if any money appropriated for Indians by Congress has reached the high efficiency of the few thousand dollars appropriated for developing the water supply in the Navajo county.

There are something like 14,000,000 acres of land, of all kinds, that have an economic value in this country. Of this acreage 51,000 acres are classed as agricultural (an eastern farmer would call almost all of such land worthless) and the Indians farm less than 25,000 acres but use all of the 13,800,000 acres of grazing land for their flocks which aggregate nearly 1,300,000 sheep and goats; their herd of scrub ponies numbering 80,000 and their cattle which total about 38,000 head. An agricultural survey of this country has never been made; the estimate of 51,000 acres of agricultural land is based on the known area which might be irrigated. Undoubtedly there are large tracts of soil which need only water to make them productive but such lands lie so far from the present available water sources that the cost to irrigate them is prohibitive.

I found three problems pressing for solution, land, school, and water. The land problem involves over 100 townships in the public domain east and south of the Navajo, Moqui, and Leupp Reservations. These townships are occupied and, in common with white stockmen, used by some 6,000 nonreservation Navajo Indians. The solution of the land problem calls for congressional legislation and negotiation between the Department of the Interior and the railroad companies. The water and school problems affect the whole Indian population. The water supply can be increased through larger appropriations, and a school census and new school policy are necessary to arrive at a satisfactory solution of the school problem.

The Santa Fe Railroad skirts the southern edge of this country, and for 50 miles on each side of its right of way the public domain is a checkerboard, for the odd-number sections belong to the Santa Fe and Frisco Railroad Cos. and the even-number sections are the public domain. Almost all of the nonreservation or public domain Navajos live north of the Santa Fe right of way. The railroad lands in the Navajo country have been sold or leased. Indians have leased some of the townships. The railroads not only have the legal right to sell their lands, but such sales would be in line with the best business practices, for the railroads have been paying taxes on these lands for years. The Santa Fe Railroad for a number of years refused to sell its lands because it hoped that some way would be

opened which would allow the Indians to acquire the railroad sections, but, apparently, the Santa Fe Railroad has come to the conclusion the Government can not or will not develop a practical method by which the railroad lands can be secured for the Indians, and such lands now are offered for sale. If the railroad sells the railroad sections to white cattlemen the Navajo Indians, now occupying and using the lands, practically will be evicted, and the land problem will cease to trouble the Government, for it will be transformed into an ordinary problem of caring for several thousand destitute men, women, and children.

The public domain to the east and south of the reservation is occupied, as I have said, by some 6,000 nonreservation Navajo Indians. Several thousand Indian allotments of 160 acres each have been selected, but the allotments have not been approved, nor have any trust patents been issued to the Indians. A few of the white men have homesteaded. The white homesteads are of 640 acres each, four times the size of an Indian allotment. Every useable square foot of all the public domain area under consideration is grazed by sheep, goats, horses, and cattle; there is not an idle acre in the country, except desert and rock-clad lands which are of no use and can not be used for any purpose.

The 6,000 nonreservation Navajos on the public domain were born on the land, as were their ancestors; in every respect, except actual ownership, it is their land, but not an Indian owns a foot of it. Although they do not live on reservations and, therefore, are nonreservation Indians they belong to the Navajo tribe and retain their tribal relations. Although they are nonreservation Indians, receiving nothing from the Government in the shape of money or land, they are wards of the Government, for the Government has assumed supervision over them. The Pueblo Bonito jurisdiction is entirely on the public domain; the agency seat is at Crownpoint, N. Mex., where a reservation boarding school is located. This jurisdiction is called a reservation, but actually it is an agency.

These Indians are self-supporting—they get no money or rations from the Government—they neither ask nor want anything from the Government. Like all Navajo Indians they are herdsmen, each family owning sheep, goats, horses, and some cattle. The Pueblo Bonito Indians are typical Navajos and conditions on the Pueblo Bonito jurisdiction are typical of a very large part of the whole Navajo country. This jurisdiction covers an area, approximately, of 60 by 50 miles and 60 of the 100 townships under consideration are in the Pueblo Bonito area. Thirty-three townships (that is the railroad lands in 33 townships) are leased to white men and 7 to Indians who pay from \$230 to \$280 rental for a township a year. There are but 34 white homesteaders in this area. According to the best information obtainable about 90 sections of railroad lands have been sold.

In all the Pueblo Bonito jurisdiction there is not one living stream of water. There are 9 artesian wells, the largest of which is on a white man's land and is fenced off so that the Indians can not use the water. There are about 20 stock wells equipped with windmills, 6 shallow lakes (mere drainage ponds) which, with the exception of one, are dry most of the year, and a number of so-called springs which are really "seeps" from which the water oozes out from the sand, and that spring is considered an important source of water

supply if a gallon of water can be collected from it inside of five minutes.

White stockmen figure that 640 acres, a square mile, will support from 10 to 20 steers or from 20 to 60 sheep, depending upon the season. For two years there has been an abnormal drought and a number of white lessees have moved their cattle from the ranges in this country. All the range is overgrazed and white men and Indians agree that it will take several years of good grass seasons and careful grazing to renew the range.

It is quite certain if it had not been for the drought and the effect of war on labor and man power much, if not all, of this public domain would now be under the complete control of white men and the Indians would have been evicted simply because they would not have been able to compete with the white stockmen. By leasing and buying railroad sections, homesteading and leasing State school sections, a white man can control a grazing unit which would give him the absolute monopoly of from one to three townships. If this railroad land is sold it will be sold to white men and there will be a reversal of economic conditions for a few white stockmen and their white employees will take the place of 6,000 producing and purchasing Indians; and instead of 6,000 Indian customers the stores at Gallup, Holbrook, Thoreau, Winslow, and other railroad centers, will have but a mere handful of cow boys and stock bosses; instead of 6,000 men, women, and children buying food, clothing, supplies, and even some of the smaller luxuries, there will be several thousand Navajo men, women, and children to be cared for by the State or Government or both.

The effect of this reversal of economic conditions upon the towns along the railroad would be serious to local merchants and the increase of live-stock shipments over the railroad would not amount to much. This is the opinion I found among a number of business men who formerly opposed doing anything which might tend to secure the public domain for the use of the nonreservation Navajo Indians.

The citizens of Arizona and New Mexico are outspoken in their opposition to any increase of the present great area of nontaxpaying lands in those States by the extension of Indian reservations or the making of new ones. When it is considered about 36,500 square miles of New Mexico and Arizona are Indian lands, which do not pay taxes; that the total area of both States is around 336,000 square miles; that enormous forest areas are set apart in National Forest Reserves; that thousands of acres are in national monuments and tens of thousands of acres are still public domain, it is small wonder the taxpaying citizens of the two States are opposed to giving more land to nontaxpaying Indians.

This public sentiment must be taken into account in any attempt to secure the public domain for the permanent use of the Indians. It was this sentiment which stopped the efforts of the Government to exchange some of the railroad lands for lands in other parts of the country and to turn these railroad lands over to the Indians by covering them with an Executive order. As a basic proposition, on which to build up plans to secure lands to the public-domain Navajos, the payment of taxes by the Indians must be considered. I am strongly of the opinion from my talks with the

nonreservation Navajos that most of them will willingly pay taxes if they are given that confidence in their future which comes with the assurance of permanent land occupancy.

As I have shown, public-domain sections and railroad sections alternate, forming a checkerboard. This arrangement, made in the early days of railroad land grants, was a wise and far-sighted precaution of the Government, designed to prevent the railroads from withholding large blocks of good agricultural lands from settlement for future profit. In those days little thought was given to the arid and semiarid lands in Arizona and New Mexico, useful only for rough grazing and usable only in large units. In Arizona and New Mexico men do not talk of grazing land in terms of sections or acres; about the smallest unit of rough grazing land they consider is a township of 23,000 acres. In the east, where 40 acres of good land are enough for a profitable farm, it was well that sections should be regarded as large units, but 640 acres, a square mile, of Arizona and New Mexico public domain are not enough to feed more than 16 steer or 75 to 80 sheep. It is not agricultural land, for there is no water for irrigation. It only can be used for rough grazing and much of it can not be used for even that. The checkerboarding of this land is an embarrassment to the development of the country, an unfair arrangement, and no longer can be justified. It is unsound economically and no one can offer a valid reason for the continuance of the system.

This is the way representatives and business men of that country are talking to-day. They are seriously considering the urging of legislation which will enable the Secretary of the Interior to negotiate with the railroads and other parties in interest for rearranging the public domain on each side of the Santa Fe Railroad in Arizona and New Mexico, so that all the Government lands will be blocked in solid townships or parts of townships and all the railroad sections likewise. The idea is not new; it has been brought to Washington several times but the white people of Arizona and New Mexico could not get together on the proposition. It lacked influential local backing. Public sentiment favoring what is known as "blocking" the land is increasing and the time seems ripe for bringing this matter to the attention of the Department of the Interior and Congress in the interest, not only of the Indians, but the white people.

It might be asked "in what way would blocking the public domain and railroad lands benefit the nonreservation Indians?" It must be borne in mind that the white people who are beginning to favor this proposition are not considering the Indians at all; they have in mind all of the railroad land-grant belt contiguous to the Santa Fe right of way in both States, Arizona and New Mexico. The Navajo Indians occupy only about 100 townships in this belt, a relatively small area. If the proposed rearrangement of the public and railroad sections went no further than merely blocking the land the Indians would be but little better off than they now are. It is probable there would be less friction with white stockmen but their future would be as uncertain as it now is.

To benefit the Indians through this proffered plan it would be necessary to secure the public domain for their permanent use and this only can be done through appropriate legislation and depart-

mental action. The consolidation of each class of land under consideration unquestionably would have the effect of making the railroad lands more attractive to purchasers and lessees but, at the same time, it would put the public domain sections in better arrangement to carry out any practical plan for securing such land for the use of the Indians. Of course there are difficulties in the way of any purpose to make the Indians actual owners of the land, which is now public domain, but those who are interested in the proposed rearrangement of sections for the benefit of the Indians are strongly of the opinion that Congress and the Department of the Interior would be able to work out some practical scheme looking to Indian ownership of the public domain land in the 100 townships involved in this proposition, an ownership which would carry with it the full responsibilities and obligations of a landowning citizen.

Supt. S. F. Stacher, of the Pueblo Bonito school and agency, has under his charge several thousand nonreservation Indians, and 60 of the 100 townships are in his jurisdiction. For years he has labored earnestly and continually to secure the public domain or railroad lands for the permanent use of his charges. When efforts to exchange the Santa Fe Railroad sections in his jurisdiction for lands elsewhere were stopped by the provision in the 1918 Indian act which prohibited the extension of any Indian reservation in New Mexico and Arizona except by congressional action, Mr. Stacher put forward the proposition to block the railroad and public-domain lands preliminary to securing an adequate acreage for the permanent use of the Indians.

Some of the white stockmen and business men in that section saw the advantage to them of such an arrangement, and I found a number of indications of a growing public sentiment in favor of the proposition. Father Weber, of St. Michaels, Ariz., and Supt. Peter Paquette of the Navajo Reservation are in favor of the proposed rearrangement of the public domain checkerboard. In Albuquerque I talked with a number of leading men who are interested in stock raising and the development of the country, and in every case found them favorable to the proposed plan which I have outlined above.

According to the latest figures available and which are contained in the report of the Commissioner of Indian Affairs for the fiscal year ended June 30, 1918, the total population of the Navajo Indian country, exclusive of 2,285 Hopi in the Moqui Reservation and 288 Hopi and 190 Paiutes in the Western Navajo Reservation, is 30,772, of which 16,000 are minors. There is nothing in the report to indicate if the Navajo Indians in the southern part of San Juan County, Utah, are included in the figures of the Western Navajo Reservation. The proportion of minors to the total population appears to be abnormally large, but everywhere I went I saw many children around the hogans. Undoubtedly the Navajos are a prolific race and rapidly increasing in population.

The commissioner's report shows that in the six superintendencies of the Navajo country there are 9,613 children eligible for school and that only 2,089 attend, leaving 7,524 children who are not attending school. The total school capacity of the reservation boarding, mission boarding, reservation day, and mission day schools is only 2,072. The Navajo school children in the Moqui Reservation have no

school facilities at all, for the reservation boarding school at Keams Canon was discontinued a few years ago because the buildings were unsafe and the five day schools in that superintendency are only for the Hopi, at least only the Hopi Indians attend.

This, then, is the school situation in the Navajo country; 7,524 children of school age and eligible for school can not go to school because there are no schools for them to attend. This condition has been presented to Congress and the Indian Office for many years and every year it is growing worse.

I have shown that because of economic conditions the Navajo Indians can not live in villages or towns; that their homes are scattered and wide apart from each other and the topographical character of the country makes traveling a difficult matter. These conditions make day schools practically impossible. An experiment was made with two day schools and it was a failure. The Navajos want their children educated and the only way that seems to be at all practical for educating the children is to build and maintain a number of reservation boarding schools.

There should be no hesitancy whatever in Congress appropriating money for one boarding school, at least, in the Black Mesa district of the Moqui Reservation. The several hundred school children in this district have not even a chance to go to school. They can not attend the Hopi day schools which are miles from them and besides the old racial antagonisms simply make it impossible for the Navajo and Hopi children to attend the same school. This was attempted when the reservation boarding school at Keams Canon was in operation with very unsatisfactory results.

Congress appropriates \$100,000 a year for "fulfilling treaties with Navajo Indians for schools in Arizona." For the fiscal year ended June 30, 1918, the Indian Office expended \$68,623.52 from this appropriation of which \$7,583.28 went for construction of buildings; \$1,630.13 went for repairs of buildings, and \$58,950.56 was expended on the water system of the Navajo school, a dormitory at Tohachi boarding school and some building at the Pueblo Bonito school.

With an education denied 7,524 children because there is not a school desk in the entire Navajo country for one of them, this treaty appropriation of \$100,000 for Navajo schools is simply pitiful. These children are entitled to an education; they are of a race which in time will become an important part of our citizenship. The time is coming when the Navajo Indians will be voters, and seven-ninths of their children to-day are barred from school.

I can not place too much emphasis upon the immediate necessity of the Government taking hold of this problem with the earnest intention of arriving at a quick solution. I feel positive that if a commission of Senators and Representatives of the United States Congress were to visit this reservation its members would return to Washington to urge legislation, backed by sufficient appropriation, to immediately build nonreservation boarding schools to give these 7,524 schoolless Navajo children an education, the lack of which is a shame and disgrace to the American people who are the guardians of these Indians and therefore responsible for this unjustifiable and inexcusable breach of trust.

More water is the prime necessity in the economic development of the Navajo and Hopi Indians; more water for domestic and stock

purposes. While the Navajo country is not absolute desert, it probably is one of the driest parts of the United States. The scanty rainfall is distributed very irregularly throughout the year. The climatic and soil conditions of this immense area make it well-nigh impossible for the average white man to realize a livelihood in it, but the Indians, for generations, not only have lived here but have increased in population. Some, it is true, barely exist, but most of them seem to be in fair circumstances and there are a few who might be called "well off." Although the rainfall is very scanty, it is enough to start grass and other vegetation and even bring them to maturity in most parts of this country, providing fair to good grazing for a few months.

It is the water supply and not the feed primarily which goes to make this a grazing country. Where water and grass together are available the land is grazed; where there is grass and no water (and there are large areas in this condition) the grass is useless; where there is water and no grass (and there are districts of many square miles in area in this country where there is no grass near water) the water can only be used for domestic purposes and for the needs of travelers. Large portions of this country have no natural water whatever except occasional seeps or water holes, which furnish water for a short time after the melting snows in the spring or storms at other times and then become dust dry. It is the quantity and distribution of water that set the limit for the size of the flocks and herds in the Navajo country.

Before leaving Washington on this survey I talked over the Navajo matters with Commissioner Sells and Assistant Commissioner Meritt. Both laid special emphasis on the question of the water supply for that country. It was suggested I get in touch with the Irrigation Division of the Indian Office and I called on Mr. W. M. Reed, chief engineer of that division. Mr. Reed not only gave me a great deal of information but made a number of suggestions which proved to be most valuable and helpful. On my way West I stopped at Albuquerque and called on Mr. H. F. Robinson, superintendent of irrigation of district No. 5, which comprises the States of Colorado and New Mexico, northern Arizona, and a small part of Utah.

He told me for the past seven or eight years the Indian irrigation service has been trying to increase the water supply of the Navajo and Hopi Indians both for stock and domestic purposes. He said:

The water supply for a grazing country involves not a few large supplies but many small ones; that it is not necessary to increase the supply at points where water exists but to try to develop it at other points where there is grazing and no water. In considering the development of water at places it must be borne in mind that too great a quantity at any one place, when there is a scarcity at others, will naturally cause that part of the range to be overstocked; and as at no place is the grass very luxurious there is great danger of entirely destroying all of the feed near the water by overgrazing it.

Stock raising, especially the raising of sheep on these reservations, has proved the salvation of the Indians. They are natural herdsmen and for a number of years their flocks have increased to about the maximum figure that natural water would supply, although the limit of grazing has not nearly been reached. The natural increase of the flocks would reach a maximum quantity, then there would be a season of drought and the mortality would be very great, reducing the flocks to the number that could exist on the diminished water supply.

The work that we had been doing under the name of underground water development consists of deep well drilling (on wells over 300 feet deep) which

has been for the purpose of exploring for or developing artesian flows; shallow well drilling (for wells less than 300 feet) in the Navajo and Hopi country; well maintenance and the development of springs and water holes. For a couple of years we were exploring for water at depths of more than 1,000 feet under the direction of the Geological Survey and it was demonstrated that artesian water could not be found in the Hopi country, but it was found in the eastern part of the Navajo Reservation north of Gallup.

The past year, with its extreme drought, has demonstrated to both the Indians and the service the great value of this underground water development. I have been familiar with the Navajo country since 1904 and this has been the driest season during these years. All of the water holes have dried up, a few supposedly permanent lakes have no water, and many of the springs and seeps have failed. There is one lake in the Chin Lee Valley which has never been known to go dry to my knowledge, but it has been absolutely dry this year. Were it not for the wells we have put down in the vicinity of that lake much live stock would have been lost already. In a report from Foreman Womack he makes a statement that "had it not been for the wells already put down a large number of the Navajo and Hopis would have been out of the stock business eight months ago."

By a happy and fortunate coincidence I met, at Gallup, Mr. Alexander H. Womack, who has direct charge of the work of the Indian Service Irrigation Division in the Navajo, Moqui, Western Navajo, and San Juan Reservations. He was just starting on a tour of inspection and took me with him. I do not suppose any man, excepting perhaps Prof. H. E. Gregory, knows more about the Navajo country than Mr. Womack does, for his duties require him to cover the entire district and the character of his work brings him in intimate contact with the Indians, who told me he was one of their best friends.

With him I traveled over 700 miles and wherever I went found unmistakable evidences of the fact, as stated by Mr. Robinson, that the stock wells, drilled and installed by the Irrigation Division, not only had saved the Indians from great stock losses during these last two years of drought but, in many cases, they had saved them from actual destitution.

The Indians told men they could not have pulled through the second summer of the drought had it not been for the irrigation service wells, and every missionary, Indian trader, Government employee, and white stockman with whom I talked declared that these stock wells not only had saved the situation for the Indians by supplying the precious water in areas where the springs had dried up but had opened up new pastures in districts where before the range could not be used because of lack of water.

The Indian Service Irrigation Division has put down about 125 shallow wells for stock purposes. The standard equipment for each well consists of a windmill on a steel tower with a galvanized iron tank and watering troughs. These wells are strung along valleys and are from 6 to 8 miles apart. Every new well put down adds from 12 to 16 miles to the travel distance of the service men who go from well to well to oil the machinery and make such repairs and adjustments as are necessary for operation and maintenance. It thus will be seen that every new well installed necessarily adds to the expense of maintenance, and this fact has apparently been overlooked by the congressional committees in making the appropriations for water development in the Navajo country, because practically the same appropriation is made each year.

When I saw the well-driving machinery which was used by the Irrigation Division in the Navajo country I really was amazed at the amount of work the service had accomplished, because the rigs were old and of a type not designed for driving wells in that kind of country. The policy of the irrigation service in sinking many shallow wells, equipped with windmill-driven pumps only for the purpose of watering stock, has proved to be the best policy. At the same time there seems to be sound reason for attempting to develop the artesian water in certain parts of that country for irrigation purposes and I asked Mr. Robinson to prepare a short statement for me on this subject. Later he handed me the following:

As you are familiar with the needs of the Indians and the proposed exploration for artesian water for the purpose of irrigation it is not necessary to go into any details of this part of the subject.

The point you wished me to cover is, in my opinion, the possibility of securing artesian water and then, following that, an estimate of the cost of putting down one test well.

It is possible that at any place south of the Hopi villages artesian water may be found. The geological formation is such that water that falls throughout the Black Mountain country may be carried under impervious strata to the south, and by piercing a hole through this material may rise sufficiently high to make a flowing well. This is the opinion of Prof. Herbert E. Gregory after a careful reconnaissance of the entire country. In his report entitled "The Navajo Country," published as Water Supply Paper 380, on page 182, he gives the geologic formation of this section in which he thinks that artesian water is likely to be struck, and that the well sunk at Keams Canon, while it gave negative results and demonstrates the unreliability of the Dakota sandstone as a water carrier of prominence in this area, he does not think that it means water may not be found in other parts of this area; for he says on page 175, "Because of the variable nature of the Dakota the Keams Canon well does not furnish conclusive evidence that similar wells at First Mesa, Second Mesa, Oraibi, and intervening points will be unsuccessful."

Of course, the sinking of such a well would be entirely experimental, and if such a well is put down it should not be less than 2,000 feet in depth, unless artesian water is secured at a lesser depth. To do this we would have to purchase a drilling rig with a capacity of at least 2,000 to 2,500 feet. We could put in a portable rig which would be available for work at other points, or we could build a wooden tower and put in an engine and boiler with a bull wheel and walking beam, but such an outfit could not be moved to another point without being entirely rebuilt.

The price of all machinery has increased so greatly that I am unable to give you any accurate figures without first securing them from the makers of these rigs, but from data secured lately I believe a portable rig such as I mention would cost, complete with all tools, cable, etc., not less than \$5,500 and perhaps \$7,000. Such a rig would have about a 25-horsepower boiler, locomotive type, and engine about the same rated horsepower, with approximately 10 by 10 cylinders and equipped with tools for drilling a hole of 12, 10, 8½, 6½, and 5 inches in diameter, for it would be necessary to begin with a 12-inch hole at the surface and put down the size hole as far as the formation would allow, then of course to the next smaller size, and it is probable that at the depth of 200 feet we would get down to 5-inch casing.

All well casing has increased in price at least 100 per cent, and it may be difficult to get it at any price. It is estimated that a well 2,000 feet deep would cost not less than \$15,000.

With a new rig and everything working in the best manner we should be able to do rapid work at a minimum cost, considering the market. We have an old well rig putting down deep wells, and it cost us, owing to difficult drilling and the fact that the rig would not work anywhere nearly as efficient as a new one, \$12,000 to put down well No. 113, which is 1,050 feet deep. This well is located about 40 miles north of Gallup.

In the estimated cost of the rig it is probable that the wooden tower rig with the equipment could be put in for \$1,000 to \$1,500 less than the portable rig.

There are several small irrigation projects in the country, notably the Marsh Pass and the Ganado projects, both of which are practically complete, and together they will enable the Indians to farm something like 3,000 acres of land. In addition to these projects is the Wepo Wash project in the Hopi country.

All of the agricultural lands of the Hopi Indians consist of the sandy-bottom lands along the three main washes that run between their mesa. The best single area they have is what is known as the Wepo or Second Mesa Wash. This wash, heretofore, has had no defined channel for a number of miles and in this flat, watered by the occasional floods, are extensive cornfields.

Several years ago the valley commenced to cut up with narrow deep channels commencing at its junction with the First Mesa Wash. These channels are gradually cutting back through the fields, and some of their best fields have already been destroyed, and if something is not done soon the rest of this area will be rendered valueless. A study has been made of the situation and a method of controlling the flood waters coming down and preventing further erosion has been worked out. The original suggestions for this work came from Foreman Womack and, while some of the details have been modified considerably, any credit for the successful working out of the plan is due to him.

The plan in brief is to spread out the flood waters coming down this valley and prevent their flowing in any defined channel, and to try and build up by silting the channels that have already been formed. This will be done by first a rock and brush dam in the channel at a point where it is very shallow, throwing the water out onto the floor of the valley where it will first be guided away from the stream channel by means of earthen dikes, and its distribution and control by means of what might be termed a porous dam.

This system works on a theory that the water, when it comes down the stream, will carry with it not only boulders and sand but floating debris. As the latter strikes the porous dam it clogs to a certain degree the wire netting of which this dam is constructed, this of course retarding the water to a certain extent. The water naturally backs up and within a few minutes there is quite a pond behind the dam. As the water continues to carry debris down the stream the blocking becomes more complete and the nonflowing material, as it is being carried down the stream, naturally comes to a stop when it strikes the comparatively still water and sinks to the bottom of the upper end of the pond. This operation shows that the floating debris is checked by the dam itself, while the heavier material has filled practically all of the basin before it comes in contact with the dam, or rather the floating material behind the dam.

These dams will be placed at intervals, depending upon the slope of the land, and will be so built that the top of one dam is at the elevation of the bottom of the one above it. The accumulation of the material between these points will form level steps upon which the crops can be grown, and the water of the stream will be spread over such a wide area that it will not run with any depth across this land, hence will not wash or injure growing crops. In addition to these light dams, gates will be placed in the dikes that are constructed to assist in the distribution of the water and the irrigation of lands lying between the dikes and the stream itself.

The original plan was to reclaim something over 1,000 acres of land at an estimated cost of \$7,700, but the last report submitted (which has been approved) will cover about one-third of the area, it being thought that it might be wise to see this part complete and tested that any errors in construction might be remedied before further work is done. To complete the part covered in this last report Superintendent of Construction Post estimates \$2,125, but Mr. Robinson has asked that \$3,000, or so much as may be necessary, be authorized owing to constant changing costs of material and increased cost of labor.

I have gone into the details of the water problem to emphasize the fact that Congress, simply by enlarging appropriations to an adequate amount for the water supply of the Navajo Indians, can bring about a large increase, almost immediately, of the grazing areas in the Navajo country, thus opening up more territory to meet the insistent demands of a growing population and also, in all probability, developing new agricultural areas for the Hopi Indians. There are no tribal, economic, administrative, or legislative complications to settle; no new policies to formulate and try out. The men and machinery are on the ground, the work is going on; all that is needed is more money for construction and maintenance of shallow stock wells in the Navajo and Hopi countries and for drilling one deep well south of the Hopi villages to ascertain if artesian water can be developed in that section. One flowing well in the country south of the Hopi villages would do more to hasten the civilization of the Hopi Indians than years of effort under present conditions for the flowing water, irrigating acres of land which need only water to make it very productive, would bring the Hopi Indians down from their high rock mesas to the new farm lands made by the artesian well, and this would be such a radical change in their living conditions that it would be a long step forward on the road to progress.

RECOMMENDATIONS.

As this is a report of progress and not a final report I have only the following general recommendations to suggest:

That the board stand ready to aid the white citizens of northern New Mexico and Arizona to secure appropriate legislation and departmental action to bring about a rearrangement of the public domain and railroad sections contiguous to the Santa Fe Railroad right of way in both States, so that each class of land shall be blocked in townships or half townships, where such rearrangement is possible, keeping in mind the securing of the public domain east and south of the Navajo, Moqui, and Leupp Reservations for the permanent use of the nonreservation Navajo Indians.

That a persistent and insistent campaign be conducted to provide enough school facilities to furnish every Navajo boy and girl an education.

That the underground water development in the Navajo and Hopi countries by the Irrigation Division of the Indian Service be given special attention by the Indian Office and Congress to the end that enlarged appropriations shall be made for the construction and maintenance of shallow stock wells, the drilling of artesian wells,

and the development of agricultural lands in accordance with the plans and purposes of the Irrigation Division.

Respectfully submitted,

MALCOLM McDOWELL,

Member, Board of Indian Commissioners

Hon. GEORGE VAUX, Jr.,

Chairman, Board of Indian Commissioners.

SUPPLEMENTAL REPORT ON THE NAVAJO INDIANS, BY MALCOLM McDOWELL.

MAY 17, 1919.

SIR: When I was investigating the conditions of the nonreservation Navajo Indians who live on the public domain in northwestern New Mexico and northeastern Arizona in October of 1918, I was prevented by lack of time from visiting the Navajos who live on the public domain east of the Zuni Reservation. During my visit to the Zuni, in May, 1919, I took advantage of the opportunity to visit the Navajos who are under the jurisdiction of Supt. Bauman of the Zuni Reservation and found these nonreservation Indians in a deplorable condition. I desire, therefore, to offer this as a supplemental report to my report on the Navajo Indians filed with the Secretary of the Interior.

Unless measures for their immediate relief are taken about 500 Navajo Indians who live on the public domain and railroad lands east of Ramah, N. Mex., a Mormon town just east of the Zuni Reservation, will become destitute. Their flocks of sheep are decreasing; their range is becoming smaller each year; they and their white neighbors can not occupy and use the same land under present conditions. The railroad lands practically are all leased and each year finds the Indians closer to pauperism.

The Indian Office report estimates there are 230 Navajo Indians under the Zuni Reservation. White stockmen and Indian traders say there are over 500. Whatever the actual number is, these Indians are in desperate circumstances. By placing these Indians under the jurisdiction of the Zuni superintendency the Government has assumed guardianship of them, and so far as I can learn that is about all the Government has done for this band. If the guardian does not come to the aid of its Navajo wards promptly there will be another black mark scored up against the American people for breach of trust and neglect of plain duty.

I will admit the problem is somewhat difficult of solution, but this difficulty should be no bar to an immediate effort to save these Indians from ruin. They can be made self-supporting and a creditable part of New Mexico's population if an intelligent plan for their redemption is adopted and put into effect. It seems to me the emergency can be met by leasing the railroad lands of a couple of townships. This would give the Indians the use of something like 44,000 acres of grazing land and would tide them over. This would cost something like \$600.

I can do no better in presenting the condition of these Indians than to quote statements made to me by Supt. R. J. Bauman of the Zuni Reservation and Mr. Evon Z. Vogt, a ranchman whose home is

near Ramah, N. Mex., and who has lived among these Indians for a number of years. I asked Mr. Bauman to secure for me some figures which would indicate the number of sheep which a nonreservation Navajo family should have to provide a frugal living for it. He said:

Economic conditions of the Navajo Indians living on the public domain in Arizona and New Mexico are such that it is a physical impossibility for them to exist on an allotment of 160 acres per capita.

The average family consists of four people. Practically the only means for a livelihood in this section is that of sheep raising. To provide a frugal living each family should have a bunch of 500 head of sheep. Under favorable conditions the sale of wool, pelts, and increase of the herd should bring a gross income of approximately \$725 a year from such a herd. Local stockmen estimate that to provide grazing for one sheep 8 acres are necessary. To provide grazing for 500 sheep 4,000 acres are necessary, a section of land, 640 acres, for each 80 head of sheep. Cattle or ponies eat more than twice as much as sheep, thus requiring at least 20 acres grazing for each. Allowing that each family has 15 head of horses and cattle would require an additional 300 acres. Thus, to provide a bare living for a Navajo family, 4,300 acres are needed, or for each person, 1,075 acres.

Approximately 230 Navajo Indians under the Zuni jurisdiction have their homes south and east of the eastern boundary of the Zuni Indian Reservation and south of the town of Ramah, N. Mex. These are styled the Ramah Band of Navajos. These Indians and their forefathers made their homes on this land and the land round about Ramah long before a white man ever saw this part of the country. The white men have come in and settled up the Ramah Valley, crowding the Indians on to the barren lands to the south, and now the cattle companies and others are taking possession of all this area last mentioned, even to grazing over the little quarter sections of land on which the Indians have filed allotment applications. This is bringing the Indians face to face with want and privation.

Mr. Evon Z. Vogt is a graduate of the University of Chicago; in that city he was a practical sociologist doing welfare work, when a student, in connection with the activities of the University of Chicago Settlement in the stockyards district. He said:

It looks to me as if the time had come for a show-down in regard to the Navajo Indians living near this place. I have been living here among them for four years and am familiar with the conditions here for about 10 years. The Government has not done a thing to help these Indians along the road to better living, prosperity, or citizenship.

They are living under the same squalid conditions as they were years ago. They know nothing of cleanliness, sanitation, or education. Not a family among over 500 Navajos lives in a house. They live and cook on the ground in their huts or hogans under the dirtiest conditions. Tuberculosis is increasing yearly in a climate that should cure them. The closest school for them is over 60 miles away, and the children are growing up in absolute ignorance and filth. I employ a good many of them in connection with my sheep business, and I have to sterilize the boys' heads in lambing camps before it is safe to have them in camp.

They had, when I first knew them, about 12,000 head of sheep which furnished them much food and wool for making blankets and selling for needed provisions. Four years ago, according to the word of the Government stockman at Black-rock, they owned 10,000 head of sheep at dipping time. Last year they had only 7,000 head of sheep all told. It will be seen that they are fast approaching a state of poverty. Many families have so few sheep it does not pay to care for them and others have none at all. The Cojo outfit and Petaga have the most sheep at present, but Cojo is running behind fast.

These sheep are important not only to them, but to the nation as well and something must be done at once to provide them with range and supervision. At present they have only their allotments to graze on and the public domain which the taxpaying white man, like myself and other stockmen, claim a right to for grazing purposes. We have had several conferences about and with the Indians concerning the trespassing of their sheep on land we own and lease, but the department has never done anything about the matter. They are left to themselves and are slowly being crowded out.

We ranchmen do not think the Government is treating the Navajo right or his white neighbors either. They are allowed to get along as best they can. If their sheep die of starvation or inbreed year after year no one seems to care. They are allowed to trespass on the rest of us to such an extent that sometimes our stock die as a result of their sheep eating us out.

One year they ate out the grass from the land I own and pay taxes on to such an extent that I was forced to move my cattle 25 miles away and rent water and pasture from November to May so as to save my stock. At that time the Navajos had been told that they had the right to go over other peoples' lands with their sheep. They used this advice and simply grazed out the country. A great deal of land has been homesteaded; all the land that can be leased has been leased by American ranchmen, so that these Indians now find themselves on the verge of range starvation. Nothing shows this better than the decreasing number of their flocks.

Now they are good Indians. I have employed them for four years and they are not bad people. They want to advance, they desire better sheep and more sheep. They would like to see their children clean and educated. They would like a little advice how to plant their corn and build their fences. I think it is a shame that they are allowed to flounder around the way they do without care, direction, or supervision, meanwhile imposing on the rest of us, not intentionally, but because they can not help it.

I asked Jesse Johnson, who was raised here and speaks the Navajo language well and knows every family within a radius of 25 miles of this place, for some figures about them. He said: "There are 500 Navajos hereabouts, 200 children who ought to be in school, and they own now 7,000 sheep and 1,000 horses." Mr. Johnson has been until lately stockman at Blackrock and says that there is no question about these people getting poorer and poorer every year.

We would like to see the Government get busy and do something about this. Give them a school, a doctor, a farmer, a stockman, a place to graze their sheep, and in the name of conservation shoot their infernal ponies which get more inbred every year. Meantime the Indians use not one-fifth of what they own and their ponies tramp out and eat off more range than any other animal that grazes.

I am a friend to these Indians. They work for me, they come to me daily for advice. I give them medicines, seed, and what help I can. I claim to know the conditions thoroughly and can prove anything I say about them.

Take it from me, they will be beggars in five years unless something is done in a constructive way for their benefit.

I thought once they could be moved back to the reservation. But they were born here, like it here, and would fight rather than move. The conclusion I have come to is that a school and agency and a range should be secured for them at once.

Respectfully submitted,

MALCOLM McDOWELL,
Member, Board of Indian Commissioners.

APPENDIX B.

REPORT ON THE SAC AND FOX SANATORIUM AND THE FOX RESERVATION, IOWA, BY WILLIAM H. KETCHAM.

NOVEMBER 1, 1918.

SIR: On August 20, 1918, I visited the Sac and Fox Sanatorium and the Fox Reservation, located near Toledo, Iowa. The sanatorium was originally a boarding school for the children of the Musquakie (Fox) Indians whose reservation is only a few miles away, but, as it was found impossible either to persuade or coerce the parents to patronize the school, pupils were gathered in from other tribes. In 1913, the school was converted into a sanatorium for Indian tubercular patients.

The sanatorium, under the able and fatherly management of Dr. Robert L. Russell, superintendent and physician, is in good order. Conditions are ideal so far as circumstances permit. Unfortunately, it too often happens that patients are brought into the sanatorium in an advanced stage of disease, when it is too late to effect a cure.

The segregating of tubercular Indians and the devising of some means of bringing patients into sanatoria before the disease has made it impossible to help them are questions that demand immediate and careful study.

Dr. Russell has a difficult problem in the Indians of the reservation. The Musquakie hold fee-simple patents for their reservation, the first tract having been bought by the band July 13, 1857. Other tracts of land from time to time have been purchased, until to-day the reservation comprises about 3,300 acres.

It has been the intention of the Indians from the beginning to adhere strictly to their tribal customs. For the most part they have been opposed to education, to the white man's method of life and to his laws. The patent in fee tenure of their reservation and the legal advice they have secured at times have rendered it very difficult for the Indian Office to advance them in civilization. It is said that continuous efforts of missionaries for not less than 35 years have been practically barren of results.

However, despite their stubborn adherence to Indian customs, the Musquakie are being unconsciously influenced by environment and are making some substantial progress. Two day schools have been established on the reservation which, at the present time, are well attended. Some few children have gone to nonreservation schools and four of the tribe enlisted in the war, two of whom have seen service in France. A few have built houses and all are beginning to modify their dress somewhat in conformity to the customs of the whites around them.

With an eye to profit, they have instituted an annual celebration, called a powwow, to which they invite the whites. They entertain themselves and their guests by Indian dances, and this mingling of Indian and white has an influence both for good and for evil. They are taking some interest in agriculture and are beginning to make a showing at the county fair. They seem to specialize on beans, of which they cultivate many varieties; corn and small grain are, however, the principal crops. At the time of my visit they were very much discouraged, as their fields had been flooded from an overflow of the Iowa River.

The Musquakie are particularly fortunate in having a physician for their superintendent, as the superintendent, by virtue of his work among them as a physician, comes in very close touch with them and acquires an influence he otherwise would not have. For this reason, the superstitious medicine practices of former days are gradually breaking down.

While it is true the Musquakie are making considerable progress, it is also true that the moral conditions prevailing among them are unspeakable, and this state of things can be remedied only by well-defined laws. If the laws of the State of Iowa can be extended over the reservation and executed by Federal courts, the superintendent will have some foundation on which to base his work, and

the progress of the band in the next 10 years, no doubt, will be very marked. This will be the case with all other tribes if a like foundation of law can be supplied as a groundwork for their civilization.

In this connection, the following letter from the superintendent will be found instructive:

SAC AND FOX SANATORIUM,
Toledo, Iowa, September 25, 1918.

Rev. WM. H. KETCHAM,

1326 New York Avenue, NW., Washington, D. C.

MY DEAR FATHER KETCHAM: In accordance with the promise made you on your recent visit here I make the following statement covering certain matters concerning these Indians, the correction of which will, in my judgment, have a great civilizing influence upon them.

In the old days law and order on the reservation was maintained to the satisfaction of the tribe by certain laws made and enforced by the council. At present, however, it seems that the tribal council has lost its influence and that the influence of the white man has not as yet had its proper effect. These Indians are, in fact, in the transitional stage, during which the younger element are growing up unrestrained by the older members of the tribe and in defiance of the white man's laws.

With the exception of seven serious crimes provided for by the United States Statutes these Indians are immune to the law when committing crimes on the reservation. The Indian Office regulations, of course, cover most of such crimes, but their enforcement necessitates the employment of an Indian judge and the maintenance of a jail on the reservation, and we have never yet been able to persuade an Indian to accept the position of judge, nor have we been financially able to maintain a jail.

All kinds of petty crimes are committed on our reservation, the culprits going unpunished. These include housebreaking, petty thievery, drunkenness, gambling, wife beating, and others too numerous to mention, the worst feature of the whole thing being that our men and women are thoroughly cognizant of the limitations of the law and commit crimes deliberately, secure in the knowledge that they will go unpunished. I make the statement unhesitatingly that no Indian girl in this tribe has ever reached the age of 14 years without being seduced, Indian parents having submitted their children to such treatment for years without protest, fearing injury at the hands of the perpetrators.

Probably the most disgraceful feature of the whole situation is that in regard to marital relations as maintained by our Indians. In so far as I can discover the old customs regarding marriages have become obsolete and no new customs have developed in their places. These Indians are married one day and divorced the next without any ceremony whatever and without either party securing the consent of parent or guardian. Many children of such marriages are suffering for the want of parental care. Frequently children of very tender years marry in spite of protest of parents, who realize fully the harm in such unions but who do not have the moral courage or the support of law to prevent such unions. We have numbers of cases in which men and women have been married and divorced many times, one instance in particular being a young man who was married and divorced five times before he was 21 years old. Another woman yet under 30 years has had children by three different men and is married to a fourth, and only yesterday we asked the local board to induct into the Army an intermarried citizen Indian who deserted a woman and child after telling her that he was not legally married to her. Mothers of illegitimate children have absolutely no redress and are compelled to bear the burdens of their shame alone.

This disgraceful state of affairs should be corrected by all means and the laws of the State of Iowa made to cover these Indians or new laws enacted by Congress especially for them. Personally, I believe that the criminal code of this State could be made to apply to them more easily than could the enactment of new laws. They are in a measure familiar with the laws of the State—evidenced by the fact that they do not break them while off the reservation—and could comply with them without any hardship being effected.

For this reservation some provision should be made allowing the superintendent to sit as a court for minor offenses, such offenses, for instance, as a mayor and justice of the peace handle here, otherwise minor offenses would have to be tried in Federal court 50 miles away, proceedings which would be

very expensive. The more important crimes could be tried in a regular Federal court.

In the event of such laws being secured provision should also have to be made for the incarceration of our prisoners in the Tama County jail and a payment to the sheriff fees for their care. Federal court prisoners, of course, could be cared for as heretofore.

Indian police should, if a new law is passed, be clothed with all authority afforded other officers of the law, and at the same time superintendents should be empowered to employ white officers in cases where Indian police fall in their duty, one or two instances of which have come to our notice.

In this connection a truancy law, similar to that enforced in this State, which requires the attendance of children between the ages of 6 and 16 should be enacted. Such a law would be welcomed by us and would, I am sure, be well received by the majority of the Indians who desire their children to have the benefits of our schools, but who do not have the moral courage to force their older ones in schools.

Even at this late date there are a few children on this reservation who have never been to school and who have remained out without any reasonable justification for doing so. In these cases we have been compelled to withhold annuity moneys, sometimes I am afraid working a hardship on parents or other members of the family.

Nothing, Father, pleases us at this agency more than the knowledge that there is some prospect of securing legislation so necessary for the good of this people. Nothing will hurry them through the transitional stage quicker than good laws intelligently enforced. This is not a bad people; they are very careful not to break the laws of the State off the reservation, and it is seldom that we ever have a complaint from outside sources; they will obey any law made for their protection on the reservation and the older members of the tribe, I am sure, would cooperate in their enforcement. The mere placing of laws relating to them on the statute books will have a good effect and prevent many of the petty crimes which are committed almost daily at present.

With best wishes for the success of your endeavor, I remain,

Very truly yours,

R. L. RUSSEL, *Superintendent.*

Respectfully submitted,

WILLIAM H. KETCHAM,
Member, Board of Indian Commissioners.

Hon. GEORGE VAUX, Jr.,
Chairman, Board of Indian Commissioners.

APPENDIX C.

REPORT ON THE CROW INDIAN RESERVATION, MONT., BY WILLIAM H. KETCHAM.

NOVEMBER 1, 1918.

SIR: My visit, August 22-26, 1918, to the Crow Reservation was in the nature of a follow-up to the visit in September and October, 1917, of Commissioner McDowell, who has made a comprehensive report on Crow conditions. In line with Commissioner McDowell's recommendation that a liberal leasing policy should be put into effect to the end that all the Crow lands should be cultivated, I find several large leases have since been made, the first of which was with the Sheridan Sugar Co., for something like 3,500 acres of land under ditch, which, at the time of my visit, were being busily cultivated. This company was securing additional leases which were being approved from time to time. It is certain that by the close of this year they will have nearly 6,000 acres; probably they will have more.

These leases, guaranteed bonded propositions, which run for 10 years on irrigated tracts, provide for the building of improvements on the land, and the payment of a cash rental in addition. From the sugar-beet leases the Indian derives \$3.10 per acre on unimproved land under ditch, \$5 per acre on improved land under ditch, and \$1 per acre from dry farming or grazing lands.

The largest farming proposition undertaken is that of the Montana Farming Corporation, which contemplates putting over 75,000 acres of land under cultivation. A large amount of plowing machinery and extensive plowing were in evidence on the Fort Custer flat near the town of Hardin. The corporation has written leases on 12,000 acres under the Big Horn ditch, and proposes to lease what is known as the Fort Smith flat, a nonirrigated tract of about 6,000 acres, on the upper Big Horn. It has made surveys both in the Pryor district and on the land just west of the Big Horn, known as "grazing district No. 3," but just what acreage it will take up in these districts had not yet been determined. The Montana Farming Corporation has abundance of capital for the conduct of its business, which it intends to enlarge as fast as men and machinery can be secured. This year it is engaged in wheat growing only, but plans in future to cultivate beans also. The lease of the Montana Farming Corporation is a straight crop rental lease. At its termination the corporation is to turn back the irrigated land with 25 per cent seeded in alfalfa. Its leases on irrigated lands are for 10 years, and, on dry lands, for 5 years, with a clause automatically renewing the lease if legislation is secured which will permit.

On August 29 a lease was entered into on 16 sections with Willis M. Spear, of Sheridan, Wyo., on the same terms as the leases of the Montana Farming Corporation. The Spear lease on the southeastern portion of the reservation is a dry-farming proposition. In addition to the foregoing there is a large number of small leases scattered over the reservation that have been written with individual farmers. Some of these farmers are old lessees, but many new ones have come in. While in the early spring there was land available for such lessees in almost every locality on the reservation, by the close of August it was difficult to find tracts to suit all comers.

The aim is to get all the farming land under cultivation, and I am assured that continuous effort will be made to this end. Last spring advertisements were run in various newspapers calling attention to the lands available for lease on the Crow Reservation. The policy, which will be strictly adhered to, is to provide for all small farmers who, in good faith, make application for land. At the same time care is exercised to reserve for every Indian not only land sufficient for his own immediate use but ample for him in case he should wish to enlarge his farming operations.

It will be seen that in the time of the country's need, in fact, of the world's need, for food, especially for sugar and wheat, the Crow Reservation was found to be a most valuable asset in the country's food-producing capacity. In fact, the closed Indian reservations have been able to contribute very materially to the most needed commodities of war time, no less necessary in peace times, to wit, beef, flour, and sugar; and I am convinced that if for no other reason than for the producing of these commodities on a large scale, it would be

wise policy to preserve the Crow and certain other Indian reservations intact for many years to come.

Many allotments have been made this year to correct some old errors in the allotment roll, and an effort is being made to effect a number of changes in these allotments so that allotments covering land that has value for farming or grazing purposes will be substituted for those that now cover land which is worthless.

I earnestly recommend that all children born since the allotment roll was closed be allotted before any disposition is made of any of the Crow lands. It is evident these children have tribal rights equal to any other members of the tribe. While there is plenty of land they should be given allotments, and legislation to this effect should be enacted without putting the tribe to the necessity of petitioning for it or of sending delegations to Washington.

Respectfully submitted,

WILLIAM H. KETCHAM,

Member, Board of Indian Commissioners.

Hon. GEORGE VAUX, Jr.,

Chairman, Board of Indian Commissioners.

APPENDIX D.

REPORT OF THE FLATHEAD INDIAN RESERVATION, MONT., BY WILLIAM H. KETCHAM.

OKLAHOMA CITY, OKLA., *January 1, 1919.*

SIR: I spent September 20-24 on the Flathead Reservation, Mont. I visited the Kutenai out from Polson; the towns of Ronan and St. Ignatius; and the agency at Dixon. At St. Ignatius I held a council with the Indians. As the Flathead Reservation has been allotted, the problems of the reservation are largely administrative and as numerous as the population, even more so since every Indian has several problems of his own, each of which claims the attention of the superintendent. The superintendent, Mr. Theodore Sharp, has no enviable position.

There is no Government school or any other Government institution in the Flathead country. The Flathead children attend the Catholic mission boarding schools at St. Ignatius, the public schools, and nonreservation schools.

I was requested to recommend that a contract doctor be employed for the Indians out from Polson; that a sawmill be installed at Polson; and that a flour and feed mill be put up at a convenient point on the reservation. After having given these matters consideration, I hereby make the recommendations.

The agent has been authorized to lease lands of minors without the consent of or without consulting parents, and at times makes use of this authority. I recommend, however, the Indian Office insist that parents be consulted in matters of this kind. The Indians are in training for full citizenship and independent management of their individual affairs, and the policy of consulting them about their own and their children's affairs is imperative if they are ever to become competent. I can not understand the logic of a course

that declares some Indians competent, insists all must be made competent, and at the same time permits these same Indians to be handled as so many fence rails.

The major part of the complaints brought to my attention have been taken up, some with the local superintendent, others with the Indian Office, and do not constitute matter germane to this report.

I suggest that in "closing out" the affairs of the Flathead people every possible precaution be taken to the end that the best interests of the Indians may be insured in so far as is possible. It is by no means improbable that the Flatheads at no distant date may be a "terrible example" of the effect of allotment and individualization on Indian tribes.

There has been a great deal of lawlessness among the Flathead people since the opening of their reservation. Prior to that time they bore a very good reputation and the majority regarded marriage as sacred. No sooner had the reservation been opened and the white people had settled among them than they began to disregard the marriage tie and quite generally gave themselves over to drunkenness and debauchery. The present superintendent has made a record in his efforts to suppress liquor. There is no mistaking the fact, however, that the Flatheads of to-day compared with the Flatheads of 20 years ago are in a deplorable condition.

In closing it is impossible to omit to note, as well as it is difficult to understand, the fact that although the only Indian schools on the reservation, the mission schools of St. Ignatius, with very nearly 200 Indian pupils, are only a short distance from the agency, the superintendent during the one and one-half years of his incumbency has never as yet visited them.

Respectfully submitted,

WILLIAM H. KETCHAM,
Member, Board of Indian Commissioners.

HON. GEORGE VAUX, JR.,
Chairman, Board of Indian Commissioners.

APPENDIX E.

REPORT ON THE BLACKFEET INDIAN RESERVATION, MONT., BY WILLIAM H. KETCHAM.

OKLAHOMA CITY, OKLA.,
January 1, 1919.

SIR: My visit to the Blackfeet Reservation, Mont., September 16-19, 1918, was a "follow up" to the visit of Commissioner McDowell, September, 1917. As Commissioner McDowell has made an exhaustive report on Blackfeet conditions I shall touch only on such acute questions as demand speedy remedial action. The new superintendent, Mr. H. O. Power, was appointed during the time I was on the reservation. I visited the Cut Bank Government Boarding School; the day school at Heart Butte; Holy Family, the Catholic Mission School; the tuberculosis sanatorium at Blackfoot; and held councils with the Indians at Browning and Heart Butte. Most of

the questions brought up by the Indians related to matters of administration, some of which were adjusted during my stay on the reservation and others later, after my return to Washington.

Cut Bank School.—The Cut Bank School is not in first-class condition. In addition to the present force there should be an assistant farmer or helper of some kind. A carpenter shop, which should be of brick, a combined shed and repair shop, and a cow barn are needed. An appropriation of \$5,000 was available for the cow barn, but the lowest bid on the barn was \$10,000.

As for the Heart Butte Day School, slight repairs are needed. In places patches of plaster have fallen from the schoolroom walls. The workshop is too small and should be enlarged. Mr. Burnley, the farmer, is willing to do the work if material is furnished him for making additional room. One of the imperative needs of Heart Butte is a well. Although Commissioner McDowell called attention to this matter, the drinking water is still "taken from a creek below a cattle-feeding lot." There are no police quarters at Heart Butte, although such quarters are needed and should be provided at once. A physician should be located at this point.

The Blackfeet Sanitorium.—I found no patients in the sanitorium as the sick had been permitted to go home for the Fourth of July and had not returned. There were only five patients at the time of their dismissal. The employees at the sanitorium, five in number, appeared to be earnest and competent, but it was evident the institution is not popular with the Indians. Several alterations and repairs are needed which I am told have been recommended a number of times, to no avail. The children's toilets, which at no time have ever been in use, should be repaired. The children have to go out doors in all kinds of weather, and the outside toilets are in a miserable shape and these also should be repaired. Storm windows should be provided for all windows and a malodorous cesspool immediately in front of the building should be removed to a reasonable distance.

Law and order.—What I most desire to call attention to is the lawless condition of the reservation. The Indians in their councils and people generally whom I met casually all complained that there is indiscriminate marriage on the reservation, that there is at all times a great deal of whisky drinking and drunkenness and especially during the fair at Browning, at which time, if reports be true, the disorder is such that I would advise the fairs be discontinued, as to all appearances they generate strife and debauch the people instead of answering any useful purpose. The chief of police is quite generally held responsible for the prevailing disorders. It was claimed he was giving bad example by his own personal conduct, that while he was seeking to get a divorce from his wife he was cohabiting with another woman, and affidavits to that effect were placed in my hands. It was charged also that he connived at the introduction of whisky on the reservation. Further charges were made to the effect that he arrested people, sentenced, fined, and imprisoned them without judicial process, and that he extorted money and personal property from Indians. While it would seem incredible that any superintendent would permit a chief of police for so long a time to pursue such a law-defying and scandalous course, to perpetrate such high-handed extortion, and wreak private vengeance according to his

will on the Blackfeet people generally, the charges made were so numerous and so earnestly pressed that it became evident something was radically wrong. When I called the attention of the new superintendent to the matter he stated that this man was the only one who could be relied on to discharge the duties of chief of police. I suggested if that was the case some arrangement ought to be made whereby a reliable white man could be retained in that position. Without delay I placed all this information before the Indian Office.

I most earnestly recommend that a white man be employed as chief of police on the Blackfeet Reservation, and I urge this recommendation generally for all Indian reservations where Indians can not be relied on to enforce law and order. The Blackfeet Reservation is another proof positive of the imperative need of immediate legislation such as that recommended by the Board of Indian Commissioners for establishing and enforcing well-defined law on Indian reservations.

Respectfully submitted,

WILLIAM H. KETCHAM,
Member, Board of Indian Commissioners.

HON. GEORGE VAUX, JR.,
Chairman, Board of Indian Commissioners.

APPENDIX F.

REPORT ON THE TONGUE RIVER RESERVATION, MONT., BY WILLIAM H. KETCHAM.

OKLAHOMA CITY, OKLA., *January 1, 1919.*

SIR: I visited the Tongue River Reservation, Mont., August 26-September 5, 1918. This reservation for the Cheyenne-Northern Cheyenne—is situated in the southeastern portion of Montana, just east of the Crow Reservation. The reservation is about 30 by 25 miles and contains, according to official reports, 489,500 acres, all of which are unallotted. The Tongue River Reservation is well situated and the climate is salubrious. The Indian population at the present time is given as 1,470.

RESOURCES.

The resources of the reservation are grazing, timber, agriculture, and coal.

Coal.—There is an abundance of soft coal, but the quality is not very good; the supply is ample for reservation purposes, and if there were railroad facilities some revenue could be realized from it. It is thought that when a greater depth has been explored a better grade of coal may be discovered.

Agriculture.—The superintendent, John A. Buntin, estimates that about 2 per cent of the reservation lands are adapted to agriculture, particularly to wheat growing. A fair yield of small grain can be produced on many parts of the reservation without irrigation.

Supt. Buntin has made a particularly good record as a farmer. He began operations on the divide in an effort, which has proved

entirely successful, to convince the Indians that not only wheat, oats, and hay but corn and potatoes and all kinds of garden products can be grown in abundance on what had hitherto been considered non-productive soil. At the beginning of the spring of 1915 there were only 1,200 acres of plowed land on the reservation. Mr. Buntin convinced the Indians by ocular demonstration of the agricultural value of certain portions of the reservation and encouraged them to increase their farming activities. They were responsive and broke out about 2,000 acres of sod. Authority was obtained from the Indian Office to construct a flour and feed mill which has a capacity for turning out 50 barrels of flour in 24 hours. The mill was erected at a cost of \$10,000. In 1915 the Indians raised enough wheat to provide themselves with seed and a sufficient quantity of flour for the use of the entire reservation. Since then they have steadily increased their farming until now 5,730 acres are in cultivation. While in 1914 the total value of crops raised did not exceed \$8,000 to \$10,000, it is estimated that this year the Indians have raised farm products as follows:

Wheat, 35,000 bushels-----	\$65,000
Oats, 25,000 bushels-----	18,000
Hay, 1,800 tons-----	20,000
Garden products, corn, and potatoes-----	5,000
Total-----	108,000

About 250 Indians are now farming for themselves. There are others who engage in agriculture but have no definite places of their own. All the valuable farming lands in the valleys have been taken. There is considerable land on the high divide lying between the Rosebud and Tongue Rivers, averaging about three-fourths of a mile in width and 30 in length. This tract of land is about 1,000 feet above the average valley land. In order to determine the agricultural possibilities of this high tract an experimental farm was opened up on it 11 miles from the agency on the road to Birney Farm station. During the last few years the yields on this tract have been very good.

A number of the Indians who have not had a sufficient quantity of agricultural lands have been convinced that this high tract of land is equally as productive as the valleys. As an inducement, and in order to make it convenient for Indians who could be persuaded to farm on the high divide, the superintendent fenced in approximately 400 acres and invited the Indians who live in the Ashland district to come and summer plow small tracts on this piece of land to be seeded to winter wheat. He likewise fenced in a tract of approximately 300 acres for a community farm for Indians living on Tongue River in the Birney district and invited Indians to come to this tract and farm as much as they desired. Twenty-four Indians began farming operations on this tract and have plowed land to be seeded in winter wheat. It is estimated that to provide the Indians with sufficient seed and wheat to be ground in flour for a full ration about 13,000 bushels per annum are required. This year the Indians have raised more than twice this amount. Each Indian who has raised a sufficient quantity of wheat is required to save enough seed for himself and to place as large a quantity as possible in the agency flour mill to be ground into flour. There are a number of full-blood In-

dians who have had flour ground from wheat they have raised which has been in the mill since 1915. A number prefer to leave their flour in the mill and call for it in quantities of from 50 to 100 pounds when they need it, giving as a reason that if they should take the entire quantity home their neighbors would endeavor to borrow it and they would run out before the close of the year.

For one who has known the Northern Cheyenne and their disinclination to adjust themselves to any kind of steady labor, the achievement of Supt. Buntin in the development of agriculture on the Tongue River Reservation would seem to be not only unsurpassed but unequalled in the development of agriculture among any tribe of Indians in the United States.

Good alfalfa is grown on the reservation. Where there is irrigation three crops can be counted on and this is sometimes true of non-irrigated alfalfa lands. Not less than 2,500 tons of hay (all kinds of hay) were put up on the reservation in 1917.

Timber.—There is plenty of timber for all needs of the reservation. One sawmill is in operation. This mill should be properly equipped and so conducted that all the needs of the agency and the Indians can be supplied promptly which at present is not the case.

Stock raising.—The Tongue River Reservation is particularly adapted to stock raising, 98 per cent being available for this purpose. It is well watered, the divide provides shelter for the cattle in winter, and grass is abundant. Experts declare that it is one of the best ranges if not the very best range in the country. It is estimated that the reservation could maintain 25,000 head of cattle.

In the southwestern portion of the reservation a pasture has been leased to C. M. Tainter of New York, which it is estimated contains 90,000 acres. The lessee has fenced off this pasture and pays grazing fees on 5,000 head of cattle annually in the sum of \$31,250. C. M. Tainter, in company with other parties, has been leasing pasturage on the reservation since 1910. In 1913 he obtained a personal lease at \$3.45 per head with no stipulation as to fencing. His present lease, which is a revocable permit, began June 1, 1918, to run for three years with a preference right option for three years more under the terms of the present lease. He pays \$4.25 per head per annum and has put up 40 miles of fence at an estimated cost of \$7,000. A. C. Stohr, the Indian trader at Lame Deer, holds a permit to run 40 head of stock on the reservation. He has about one section of pasture land. These two leases are the only private leases on the reservation. The Tainter lease, like most private leases on Indian reservations, is a constant source of irritation to the Indians. It is one of their stock grievances. Naturally, friction is engendered because of the proximity of the tribal, individual, and lease cattle. Charges are made that the cowboys of the individual lessee put the lessee's brand on Indian cattle and that they encroach on the individual and tribal herds in various other ways. This is a complaint one hears on most of the reservations where private leasing obtains, and, to the casual observer, the thought occurs that it would be better to make no such private leases but to stock up the various reservations adapted to grazing exclusively with Indian cattle—tribal or individual or both. There is no doubt but such a policy would obviate a world of dissatisfaction and bickering. It is contended,

however, that the leasing to private individuals on most reservations serves a useful purpose for the reason that it provides an object lesson on stock raising to the Indians and that, furthermore, since the department can not at once stock all the reservations to their capacity it is good policy to utilize the full pasturage by making private leases as in this way a very considerable annual revenue accrues to the Indians.

The Northern Cheyenne at present own about 6,000 head of individual cattle, although there are many of the tribe who have no cattle at all. The individual cattle are by no means sufficiently numerous to use the grass which the reservation produces. In addition to the individual cattle there is a tribal herd which was started in the summer of 1915 with 500 head of Herefords. In the summer of 1917, 500 additional head of 1-year-old southern Herefords were purchased. Forty-five bulls were purchased as a part of the tribal herd, which is now estimated at 1,500.

At the time of my visit, there were about 7,000 Indian horses on the reservation averaging in weight from 700 to 1,100 pounds. It was decided that at least 5,000 of these should be disposed of and the remainder, which will be needed, should be bred up. I have received word that early in October Z. F. Miller, of Oklahoma, had purchased and shipped south 500 head of ponies and that he had returned to the reservation for 10 or 12 car loads more. The Indians were receiving an average of \$20 a head for these ponies. There were on the Tongue River Reservation individual cattle, 6,000; tribal cattle, 1,500; permit cattle for the summer, 7,000; Indian horses, 7,000; total head of horses and cattle, 21,500. Stockmen contend that two horses will destroy as much grass as three head of cattle and if this contention be correct 3,500 could be added to the above total, which would bring it up to 25,000—the estimated capacity of the reservation.

I would recommend that the tribal cattle be increased as the Indian horses are sold off so as to stock the reservation to its capacity, care being taken, however, not to overstock it, as this would be a grave mistake. As much as 100,000 acres lying on the Tongue River slope have been reserved for winter use, and an effort has been made to keep all the cattle off of the winter pasture during the summer. A fence divides the summer and the winter range. I went over the winter pasture and found it covered with a fine coat of grass. The superintendent informed me that as about the same number of stock had been run on the reservation for the past three years, he was confident he was safe in saying that the reservation under normal conditions will maintain 25,000 head, which would mean an annual income to the Indians of approximately \$500,000. This divided up among the Indians would give each man, woman, and child about \$340, which would easily make a living for them. I recommend that an appropriation be made which will enable the superintendent to acquire 5,000 additional head of cattle, which he may purchase in his discretion to replace the Indian horses as he disposes of them.

It will be seen that the Tongue River Reservation with its healthful climate and abundance of water, with its coal, its timber, its agricultural land, and especially its stock-raising capabilities, is ideal for Indians. With plenty of beef and flour and all other essential

accessories the Cheyennes, if properly encouraged, kept under firm discipline, and not too hurriedly rushed into allotment and conditions unnatural to them, will develop into self-supporting and self-respecting citizens. There is no need that they should die off or that they should be a menace to the citizenship around them. Give them time to grow out of present conditions into more ideal ones. What they need most is patience, encouragement, and strong discipline.

Education.—The educational situation on the Tongue River Reservation may be summed up as follows:

Children eligible for school, 266.

	Capacity.	Enrollment.	Average attendance.
Tongue River Boarding School, Busby.....	69	72	47
St. Labre's Mission School (boarding), Ashland.....	60	35	23
Birney Day School.....	47	40	23
Lame Deer Day School.....	40	34	23
Lame Deer public school.....		21	17
Total.....	216	202	133

It would seem that the school capacity is inadequate and the average attendance and even the enrollment very poor. As for the Cheyenne, it would be better for the Indian Office to discontinue the day schools and to make it possible for the boarding schools to accommodate all the children of the tribe. The Indian children attending the public school at Lame Deer are for the most part mixed-bloods whose parents live convenient to the school. It will be good policy to encourage parents so located to patronize the public school. The distinctively Indian day school at Lame Deer is a different proposition entirely. The superintendent and every one else I talked with believe that the day school at Birney and the one at Lame Deer are of very questionable advantage to the tribe. The day school does not remove the children far enough away from the influences of Cheyenne home life and the worst feature is that during the winter months, the Indians who live at a distance, in order to send their children to day schools, camp around those schools in insanitary and poorly ventilated tents. Here, as among the Crow, these temporary colonies around the day schools become nests of vice and work great injury to old and young alike.

The Busby Boarding School.—The Busby Boarding School to all appearances must have reached its low-water mark during the fiscal year 1918. At the time of my visit the plant looked as if it had been wrecked by a cyclone. I do not know who had been in charge up to that time, but no Indian or white person had a good word to say of it. It had been the custom to light the school buildings with acetylene and there had been two explosions. One occurred about three years ago, and although no one was injured the gas building was destroyed, the lights blown out of the main building, a number of children were in danger from the explosion, and the school had to be closed in February. In the winter of 1917, another explosion occurred which killed the engineer and destroyed the lighting plant; and kerosene lights had to be used for the rest of the year. The new

principal, Mr. Chauncy L. Merriam, at the time of my visit, was busily engaged bringing order out of chaos and getting the school in readiness for the year's work. To all appearances, with the proper backing, Mr. Merriam will be able to make a creditable showing, but there is much to be done before the school will be on a substantial footing. The principal wants to put in electric lights, the cost of which he says will not be so great as for acetylene. He is of the opinion that an automatic starter (Delco system) would be preferable. He wants a good Case or Rumley tractor for the farm.

The school has plenty of land. With a tractor, 100 acres of wheat could be put in every spring, and as 20 bushels an acre is a safe estimate on wheat in that section, \$3,000 on wheat should be cleared each year. A gang plow also is needed. A machine shed is needed for the farm implements. The present horse barn is badly dilapidated and could be used for making a shed for the machinery. There is plenty of lumber at hand with which a horse barn could be put up. Three hay barns 30 by 40 are needed. At present 75 tons of alfalfa are in the dairy barn (which, by the way, is very complete and the best building of the school plant), but about 140 tons will be stacked outside which will be the occasion of a great deal of loss. At present there are about 60 acres in alfalfa, about 30 more will be put in in the spring, and three cuttings are counted on. Fifteen acres of the present alfalfa will be broken up and put into wheat, because grass is getting the better of it. The acreage will be gradually increased each year until a sufficient acreage is put in. At least this is Mr. Merriam's plan. The school has an abundance of water. There is coal in abundance on the school grounds and it would not cost more than \$1 to \$2 per ton, including the salary of the coal miner, for a lighting system run by steam. The present boiler is at least 30 years old and new boilers and a new boiler house are needed. I recommend these various improvements for the Busby school.

Mission school.—The Mission school in the Ashland district, conducted by the Ursuline Nuns, is the oldest educational institution among the Cheyenne. The greater portion of the plant was destroyed by fire and at present the school is being carried on under very unsatisfactory conditions. A new building, with modern up-to-date conveniences, probably will be put up.

Very few Cheyenne children have been sent to nonreservation schools and those who have been sent have not proved of any particular benefit to the tribe after their return.

I suggested to the superintendent that it might be good policy, when the Cheyenne come for rations, to require each Indian to have a ticket from the school showing just what the attendance of his child or children had been for the previous month and that the rations be issued in proportion to school attendance. Mr. Buntin said he would carry out this suggestion. Compulsory education is practically a necessity among the Cheyenne, but before anything of the kind is attempted suitable schools should be provided and should be conducted in such a manner that no Indian could have a reasonable ground for keeping his child out of school.

Irrigation.—The largest irrigation ditch is in the Birney district. It is 7.8 miles in length and has been built at a total cost to date of \$143,000. At present it furnishes water for about 700 acres of land.

There are on the reservation, all told, 13 irrigation ditches, 12 of them being small. During a council with the Indians held at Birney complaint was made that the irrigation ditch is not cared for, but the agency officials explained to me that irrigation will not be a feature of the reservation.

Housing.—The superintendent pointed out that there has been within recent years a great deal of improvement in house building. He stated that at present there are only five families in tepees; that of the 485 permanent houses about 110 are sanitary; and that during the past three years about 40 new houses had been completed. I visited several homes and these appeared to be sanitary, comfortable, and well kept.

Health.—Provision is made for two physicians, one located at Lama Deer and one at Birney, and three field matrons. At the time of my visit there were only one physician and two field matrons. There is much tuberculosis on the reservation. A hospital at Lama Deer is needed, as is some law by which medicine men and medicine women can be restrained from taking control of the sick. From the official records it appears that for the fiscal year 1917 the deaths on the reservation materially outnumbered the births and since my visit the influenza has swept over the reservation with many fatalities.

Disorders.—The prevailing disorders on the reservation are cattle killing, gambling, peyote eating, and the immorality of the medicine lodge. Cattle killing is on the decrease and gambling is decreasing somewhat, but peyote eating is on the increase, and about one-fourth of the tribe now use it. A returned student is a leading spirit in the propagating of the peyote craze. I am told that among the Cheyenne the eating of peyote is not confined to their so-called religious observances, but is used indiscriminately as a medicine and as a drug; that it is found in the pockets of the children in the schools and that apparently no restriction is placed on its use. Even if there were no foundation in fact for the charges of intemperance and immorality connected with the peyote "cult," and if there were no injurious physical effects resulting from it, it is, nevertheless, one of the most serious obstacles in the way of the Indian's onward progress, as it segregates those who use it into an exclusive, nonprogressive clique, crystallizes them as a separate Indian unit, distinct in every way, religiously, morally, and socially, from the whites.

The medicine men and medicine women of the Cheyenne are the bane of the tribe. It is generally asserted that they cause a great many deaths by their manner of treating diseases. Indian medicine practices more than anything else, excepting the peyote, stand in the way of the progress of the people. The medicine men and medicine women, whose practices are cruel and immoral in the highest degree, exercise an autocratic power over the sick, oftentimes despite the protests of close relatives. It is charged, apparently on the very best of authority, that the candidate for becoming a medicine man not only gives a feast but gives presents, such as horses, to the medicine man who is to teach him, and that, moreover, he gives his wife for a time to his instructor. The newly made medicine man becomes proficient through dreams by means of which

various spirits instruct him. Formerly he became proficient also through fasting and selftorture. While he may indulge in this at present, there is no positive testimony to this effect. The wife of the candidate who is learning the medicine becomes a medicine woman through her part of the ceremony, which consists of illicit relations with the medicine man who is giving the instructions. Many of the young Indians who have come out of the schools would gladly give up these hideous practices but they are coerced into them. A very efficient matron who worked on the Tongue River Reservation for some time makes this statement.

In my district there were perhaps 500 Indians and I can count 75 medicine men and medicine women. There are some of these that claim they possess the power to suck various things out of the flesh of the patient. While I was there, one claimed to suck a bone a woman had swallowed from her side. Another sucked a rock from a woman's foot. A young man who has been to Fort Shaw and to Carlisle, told me in all candor that one time a spirit struck him and he could not walk, and then an old medicine woman sucked a thorn from his side and he was all right. He said "Indians know about spirits but white folks don't know." I believe there are many of the young people who would like to break away from these old customs but they are bound hand and foot, as it were, with grave clothes. A number of young people have told me these things but have always said "You must not tell that I told you."

There are two things at the foundation of the medicine practices among the Cheyennes. The four sacred arrows kept by a high priest in Oklahoma and the sacred buffalo hat kept by one Woundedeye in Montana on the Upper Rosebud above Busby, these are the things which really give power to their medicines. If these could be gotten from them the whole thing would be crushed. Every year the Northern Cheyenne make pilgrimages to Oklahoma to attend the sun dance and arrow ceremony.

Some of them said after the epidemic that the reason for it was that they were not faithful to their old ceremonies and that they were going back to the keeping of them more faithfully.

To illustrate the hold that the sacred medicines have on the people: Once during my stay at Lane Deer, Mr. Buntin sent a policeman after Davis Woundedeye, the son of the keeper of the sacred buffalo hat. He failed to bring him. Finally four policemen were sent after him but they did not bring him. I think in a week or so he finally came of his own accord. The police were afraid to touch him, so I was told, because he belonged to the family of the keeper of the sacred buffalo hat.

If I have written anything that can be used toward making for better conditions for these people you are welcome to use it.

By all means these medicine practices should be broken up.

Law and order.—The superintendents for the Tongue River Reservation have always been handicapped and at a great disadvantage because of their isolated situation and of the lack of support accorded them in the enforcing of order. The Cheyenne are a proud, self-willed people, unsubdued in spirit. They are not inclined to be obedient when obedience is not to their liking and they would not hesitate under certain circumstances, either singly or collectively, to resort to violence. The superintendent, feebly supported by very uncertain Indian policemen, is at the mercy of these Indians and even the present superintendent has had to defend himself against violence by main strength. The situation is rendered completely hopeless for want of a suitable jail. Either a detachment of soldiers should be stationed on the reservation until the ordinary requirements of decency are enforced and life and property made secure, or the Indian Office should provide the reservation with a reliable white man as chief of police. In consideration of these conditions I am inclined not to criticize the superintendent but to commiserate

with him in his impossible task of controlling the peyote craze, of suppressing the medicine practices, and of maintaining moral conditions at a decent standard. With all odds against him, he is making a success of the reservation industrially and this of course means a great deal to the people, but there can be no true progress, no matter what the industrial conditions may be, while education lags and morals retrograde.

The Tongue River Reservation furnishes another argument for the enactment by Congress of the "Law and order" provision, proposed by the Board of Indian Commissioners, extending State, educational, health, marriage, and criminal laws over reservations as a Federal code to be enforced by Federal courts. When this basic legislation has been accomplished, then and not until then will the Indian make any genuine progress.

Mission work.—The Catholic Church has been engaged in mission and educational work on the Tongue River Reservation since 1882 or 1883. The first missionaries made a study of the language and won the good will of a fraction of the tribe, but conditions were so unsatisfactory that they left the field. The Ursuline Nuns have continued the school work without interruption up to the present day and the chaplains of the school have ministered to the religious wants of the Indians.

In 1904 the Mennonites came among the Northern Cheyenne, and to-day have chapels at Lame Deer, Busby, Birney, and Ashland. The Mennonites are very proficient in the language and give a good deal of attention to the children of the Government schools. Official statistics of religious affiliation on the reservation are as follows: Catholics 365, Mennonites 117.

I held councils with the Indians at Lame Deer, Birney, and Ashland. Many of their difficulties were adjusted by the superintendent, and a number he could not handle were later adjusted by the Indian Office.

Respectfully submitted,

WM. H. KETCHAM,
Member, Board of Indian Commissioners.

HON. GEORGE VAUX, JR.,
Chairman, Board of Indian Commissioners.

APPENDIX G.

REPORT ON THE FORT BELKNAP INDIAN RESERVATION, MONT., BY WILLIAM H. KETCHAM.

OKLAHOMA CITY, OKLA., *January 1, 1919.*

SIR: September 10-14, 1918, I visited the Fort Belknap Reservation, Mont., the agency, agency school, St. Paul's Mission School, Lodge Pole Day School; in company with Supt. Symons and Special Supervisor Charles E. Coe, attended the Assiniboin fair and held a council with the Assiniboin Indians on the fair grounds; also visited the Grosventre fair at Hayes and held a council with the Grosventre. At the time of my visit, Supt. Charles D. Munro was just going out, having been transferred to Winnebago, Nebr., and Supt. A. H. Symons was just entering upon his duties as Mr. Munro's successor.

The Fort Belknap Reservation is located in the extreme northern portion of Montana and comprises about 622,917 acres of land, all unallotted. Although the Indian fairs gave evidence of agricultural activities on the part of the Indians and were creditable, the Fort Belknap Reservation is rather adapted to grazing than to agriculture. A new flour and feed mill has been put up at Hayes which should prove very serviceable for the Indians. I recommend that the operation of the mill and the thrashing should be without cost to the Indians, as they are as yet tyros in agriculture. The reservation is an excellent horse country, but I am informed horse raising to-day on a large scale is not profitable because of the decrease in the demand for horses. The temperature reaches a very low point in winter, which is as severe here as in any portion of the United States. According to Indian Office report, there are only about 9,000 acres of arable land, of which only 4,500 acres are cultivated by Indians; there are 613,917 acres of grazing land, of which 234,217 acres are grazed by Indian stock, the remainder being grazed by lease stock. The Assiniboin number 638 and the Grosventre 570.

LIVE-STOCK INDUSTRY.

The big problem on the Fort Belknap Reservation is the live-stock industry. Winter feeding is exceedingly expensive and presents a very serious question. At the time of my visit there were being baled and freighted 500 tons of hay at a cost of \$15 per ton, a total cost of \$7,500. It has been suggested that the cattle industry at Fort Belknap can be operated at considerable less expense for wintering by doing a little ditch work at Big Warm Spring Creek. Already 4 miles of ditch are nearly completed, but two flumes and a dam and head gate are needed. This system would water 1,200 acres of hay land. It appears it would cost not nearly \$7,500, the above noted outlay for hay, to put the Big Warm Spring unit in condition to produce all the hay needed to winter the tribal cattle. This suggestion may be the clue to the solution of the winter feeding problem. There is on the reservation a comparatively small area in the Little Rockies where cattle can find pasturage during the winter. According to official reports Indian cattle, individual and tribal, number 5,205. Although the Indians complained that their tribal herd, numbering at present 2,160, does not increase as it should, I was told that there are approximately 1,200 cows and that, as there would be close to 1,000 calves, the increase would seem to be satisfactory. It is thought that instead of building up a tribal herd it will be better policy to utilize the reservation for fattening steers, purchasing 1 and 2 year olds for the purpose, and selling the 2-year-olds after two years and the 1-year-olds after three years. This policy will be put into effect gradually.

The Matador Land & Cattle Co. is the one large lessee on the Fort Belknap Reservation. It had a five-year lease, which expired and was renewed June 1, 1918. The Indians complained that the Matador company was granted a new lease without competition at \$4 per head. They were of the opinion that if there had been competition in the bidding they could have obtained at least \$5 a head. In justification of the renewal of this lease without competitive bidding, the Indian

Office holds that, under prevailing conditions, it was a good business proposition to release to the Matador people at \$4 per head, and states that because of special charges for summer grazing the amount received will be about \$4.18.

The Indians further complained that the Matador people, in putting up their drift fence, have inclosed more of the reservation than they are entitled to. They claim the fence should be moved back 6 miles. I was told that the Matador people control two-thirds of the reservation, but I did not verify this statement.

Here, as on other reservations where there are tribal stock and lease stock, the Indians make many complaints. They claim that calves are allowed to run a long time without branding, with the result that a great many are lost.

I do not feel competent to make a recommendation in regard to the live-stock question on the Fort Belknap Reservation. Commissioner Sells, Live Stock Inspector H. F. Long, and the local superintendent, A. H. Symons, are making a very careful study of the situation, and they no doubt will work out a feasible policy for the reservation.

Irrigation.—There are some questions relating to irrigation on the reservation, but I do not feel any suggestions are advisable at this time in regard to this matter, which is now under careful consideration.

Poverty.—At times there seems to be a good deal of want on the reservation. The Indians in their speeches all referred to the crop failure and voiced apprehension as to the coming winter and the starvation and suffering and death it would bring, particularly to the old and infirm. They all asked for their lease money. I believe, however, that Supt. Symons is a man who will take personal interest in the individual Indian and do not doubt but he will find a way of meeting their necessities and of applying a remedy for matters not entirely incurable.

Health.—I did not hear of much disease, but the reservation should have another physician. At the time of my visit, there was only one physician, who was located at the agency and who had to attend the entire reservation. There should be a second physician located at Hayes. In the winter it will be difficult even for two physicians to attend all the sick, as the distances are great and the snow and cold make long trips at times impossible.

Missions.—A large portion of the Indians of this reservation are Christians and their spiritual needs are cared for by two Catholic and two Protestant missionaries. Peyote has not as yet been introduced among these people and it is to be hoped they may escape this plague. Official statistics place the Catholics at 900 and the Protestants at 100, which leaves only 208 who do not profess Christianity.

Education.—There are on the reservation 325 children eligible for attendance at school. There is a day school at Lodge Pole with a capacity for 40, a Government boarding school at the agency with accommodations for 51, and a Catholic mission boarding school near Hayes with a capacity for 160. The Lodge Pole Day School appeared to be in a satisfactory condition. The same was true of the mission school, which has a very good plant but not by any means a full attendance. At Lodge Pole a new school building and cottage have just been completed.

The reservation boarding school at Fort Belknap was in every way in a deplorable condition. For lack of room one of the teachers was teaching in the poorly lighted and poorly ventilated basement. There is an imperative need for a cottage that can accommodate at least two families. The superintendent suggested that certain unused day-school buildings about 10 miles distant be moved to the agency and fitted up as cottages. As these buildings have scarcely ever been used, and as day schools, except at a center of population such as Lodge Pole, are impracticable on the Fort Belknap Reservation because of its scattered population and long and severe winters, there is no reason why the superintendent's suggestion should not be carried out. Either this should be done or new cottages should be put up. The entire agency school plant should have a thorough going over, and I recommend that an ample allowance for this purpose be made.

Law and order.—As the Indians of this reservation are largely amenable to religious restraints, the enactment by Congress of the law and order measure recommended by the Board of Indian Commissioners will effectively put an end to such causes of disorder as now exist and which are due solely to the absence of positive law on the reservation.

Respectfully submitted,

WILLIAM H. KETCHAM,

Member, Board of Indian Commissioners.

HON. GEORGE VAUX, JR.,

Chairman, Board of Indian Commissioners.

APPENDIX H.

REPORT ON THE WIND RIVER INDIAN RESERVATION, WYO., BY WILLIAM H. KETCHAM.

OKLAHOMA CITY, OKLA., *January 1, 1919.*

SIR: I visited the Wind River Reservation, Wyo., September 25–30, 1918. Of this beautiful reservation 245,058 acres have been allotted.

Agriculture.—The reservation has, according to official reports, 77,996 acres of allotted and 75,700 acres of unallotted agricultural lands. The land when irrigated is excellent for agriculture, and there are on the reservation 24 miles of main and 290 miles of lateral ditches, with 1,201 allotments under ditch, while 1,350 Indians have the benefit of irrigation. Splendid wheat, oats, alfalfa, and potatoes, and all kinds of vegetables are grown in abundance. There were three thrashers in operation on the reservation, which has a flour and feed mill and produces a surplus of flour.

Live stock.—As for grazing lands, according to official reports, there are on the reservation 169,284 allotted and 1,503,406 unallotted acres, of which 393,234 acres are grazed by Indian stock, all kinds included, valued at \$898,116.

A fine herd of 12,869 head of cattle has been built up. At the time of my visit, large numbers of cattle had come down from the mountains and were overrunning the cultivated section of the reservation. They filled the lanes and were breaking through wire fences

and eating up quantities of wheat valuable at any time, but especially at that time when the Nation stood in such need of wheat. This destroying of the wheat was likewise most discouraging to the Indians whose crops suffered.

Timber.—The total estimated stumpage value of timber on the reservation is \$756,038. There is a sawmill but the timber is scarce and difficult of access.

Coal.—There is an abundance of soft coal.

Labor.—The reservation furnishes plenty of work: Timber and coal hauling, work on roads, work on irrigation projects. Wages are good. With an abundance of beef, flour, and vegetables and plenty of work and good wages, the Indians of the Wind River Reservation have no cause for complaint, and present a vivid contrast to many Indians in other sections of the country.

Two tribes, the Shoshoni, 848, and the Arapaho, 853, in number, make a total population of 1,696 residing on the reservation. Unfortunately these tribes do not get along well together; the Shoshoni regard the Arapaho as intruders, while the Arapaho want a superintendency of their own. Even in the schools the children of the two tribes scarcely mingle at all socially.

I visited the agency; the Episcopal Boarding School for Shoshoni girls; the Shoshoni Government Boarding School; St. Michaels, the Episcopal Boarding School for Arapaho; the Government Day School at Arapaho; and St. Stephen's, the Catholic Boarding School for Arapaho.

I found the Wind River Reservation in splendid condition in comparison with what I had known it to be some 18 years ago. In recent years the Indians have made a vast deal of progress, particularly in an industrial way. The praise of former Supt. Joseph H. Norris was on all lips. He must have put in a very energetic term from the evidences he has left after him. Among other things, he constructed good roads and gave his personal attention to the individual Indian. The present superintendent, Mr. E. A. Hutchinson, in entering upon his work must, I think, have found a very well organized and highly developed reservation, and Indians prepared for a distinct move forward under his administration, although perhaps he found them a little bit "spoiled" by the big heartedness of "Joe" Norris. With the right kind of support from the Indian Office, Supt. Hutchinson should meet with gratifying success.

Health.—I did not hear of much disease on the reservation. The superintendent is having a very commodious and well-appointed hospital made out of one of the substantial old buildings of the Fort Washakie barracks.

Education.—With a limited amount of improvements and slightly increased capacity, the schools of the reservation will afford ample facilities for the education of the 475 children who are eligible for school attendance. The Episcopal School for Shoshoni girls affords refined, homelike surrounding for a limited number of girls; St. Stephen's mission school is most highly spoken of by the Indians and by everyone on the reservation and in that section of the country; the comparatively new Episcopal School for Arapaho, St. Michael's, is enlarging its plant and putting up some very fine and

substantial buildings. This school is run on unique lines. The superintendent explained to me that it was the intention of the institution to develop the children along tribal lines. The school does not insist on the discarding of Indian dress, language or customs, but seeks, so it was explained to me, to give the Indian an education, while at the same time he is permitted to retain his Indian customs so long as he may desire to do so. This program has called forth a great deal of criticism and opposition from various quarters. It seems, however, to have the approval of the Episcopal Church authorities of Wyoming, and it will be interesting to observe the results of this unique experiment. The superintendent of St. Michael's complained to me that the sewage of the Shoshoni Government School empties into the creek (or ditch) above St. Michael's School and has contaminated the water supply of St. Michael's and of the Indians living in the immediate vicinity. In speaking to Supt. Hutchison, I found him of the opinion that the contamination comes from the reclamation camp which is located still farther up. However, it matters not where the source of contamination may be, this insanitary condition should be corrected without delay.

The day school at Arapaho has a very small attendance and it was the unanimous opinion of every one, including the superintendent, that it is a very expensive institution, not justified by needs or results, and should be discontinued. I recommend that it be discontinued. The children of the reservation are doing exceedingly well in the boarding schools and probably it will be better, particularly so far as the Arapaho are concerned, to wait some years before adopting the day-school system. These Indians are still closely wedded to old Indian ideals of life and for this reason the children will advance more rapidly in the boarding schools. As the parents are close at hand and continually visit the boarding schools, they, too, will acquire a great deal of useful information by this contact.

It is very important that the Shoshoni Government Boarding School be made as efficient as possible; it has been running down of late years. A new principal has been appointed who brings efficiency and energy to his work and he should be sustained in his efforts to build up the school. At the time of my visit, school seats and desks and girls' uniforms were needed. There was no principal teacher and there was evident need for some young, energetic workers about the school. The school also should be visited by an eye specialist; many of the children need glasses.

Law and order.—On this reservation a white man is employed as chief of police. I am informed that the present chief is very efficient and I am confident that the policy of employing a white man is a good one. I have elsewhere recommended that this policy be followed on the Tongue River, Blackfeet, and Coeur d'Alene Reservations. The superintendent told me that the salary of the chief of police is paid out of the fund "proceeds of Indian labor" and that he is in reality a special officer for the suppression of whisky. The Wind River Reservation appears to have much better order than many other Indian reservations and the white chief of police probably accounts for this condition. Nevertheless there are disorders which can never be remedied completely until Congress provides

suitable laws for Indian reservations. There is a good deal of gambling among the Indians, and shortly before my arrival the chief of police had been shot and painfully wounded while in the discharge of his duty.

Respectfully submitted,

WILLIAM H. KETCHAM,
Member, Board of Indian Commissioners.

HON. GEORGE VAUX, JR.,
Chairman, Board of Indian Commissioners.

APPENDIX I.

REPORT ON THE MOUNT PLEASANT INDIAN SCHOOL, MOUNT PLEASANT, MICH., BY WILLIAM H. KETCHAM.

NOVEMBER 1, 1918.

SIR: I visited the Mount Pleasant School, Mount Pleasant, Mich., October 12, 1918. This school in every way appears to be in a satisfactory condition. Despite financial limitations induced by war conditions, all buildings were found to be in good repair. Neatness and the best of order were in evidence everywhere. Of all the Indian schools I have visited, it has the best reputation for morals. It has a fine war record in every way and is well represented in France on the battle front.

It received only 17 of the Carlisle pupils when the institution was closed. It has accommodations for 350 pupils and 350 pupils in actual attendance, a good many of whom are very small children who could remain at home for several years to advantage. Formerly the school had a four-year vocational course which later was cut down to a two-year course. Since the closing of Carlisle, the Haskell Institute, Lawrence, Kans., is crowded and several of the Mount Pleasant pupils sent down there to complete their vocational courses have been placed in private families in cities where they attend high school. Hence their vocational training is thrown to the winds. These children have attended high school in Mount Pleasant. Those who have been interested in them for years in the Mount Pleasant School feel keen disappointment that their vocational courses have been interrupted.

It is bad policy to send children from so far north as Michigan, Wisconsin, and Minnesota down to Lawrence, Kans., or Chillico, Okla. This move southward can not result in any good, physically or otherwise, to the children. Since the closing of Carlisle, there should be a school in one of the extreme Northern States with a four-year vocational course and no school could be more favorably situated for this purpose than Mount Pleasant.

A very fine dairy barn was in course of construction which will be completed at a remarkably low figure, considering present prices. It will be one of the most complete, well equipped, up-to-date barns in that section of Michigan, having stalls for 24 cows and pens for calves, cows, and bulls. As the Mount Pleasant country is decidedly a dairy country, this barn is a valuable investment.

Commissioner Knox visited this school in 1916 and recommended the purchase of additional land for pasturage and agricultural purposes. At that time the school had a farm of 320 acres. Since then, negotiations have been practically completed for the acquiring of 120 additional acres. The orchards are excellent. The power house is equipped with steam and a dynamo for electricity. It will be seen that in dairying, farming, horticulture, and mechanics the children have ample opportunities for vocational training. With but little additional expense, with probably one more teacher in the academic department, the four-year vocational course could be carried out as well in Mount Pleasant as in most any other school in the Indian service. I strongly recommend the four-year vocational course for the Mount Pleasant School.

Respectfully submitted,

WM. H. KETCHAM,

Member, Board of Indian Commissioners.

HON. GEORGE VAUX, JR.,

Chairman, Board of Indian Commissioners.

APPENDIX J.

REPORT ON THE MOUNT PLEASANT INDIAN SCHOOL, MOUNT PLEASANT, MICH., BY SAMUEL A. ELIOT.

BOSTON, MASS., *March 26, 1919.*

To the CHAIRMAN OF THE BOARD OF INDIAN COMMISSIONERS.

SIR: I beg to submit the following report upon the Mount Pleasant Indian School.

First I desire to reaffirm my confidence in the wisdom of the board in recommending at its October meeting that the four years' vocational course be reestablished at the school. The plant is adequate, competent teachers are as available as at any other school, and there seems to be no reason why the boys and girls who may wish to secure a more complete education should have to be transferred to Haskell or Chilocco. Authority should be given and provision made for giving two more years of vocational and industrial training at Mount Pleasant, thus avoiding the expenses of transfer, the unnecessary separation of the children from their families and natural environment, and the physical risks due to change of climatic conditions. The Michigan Indians are altogether likely to continue to live in that State. Their children should receive their education there.

I take this opportunity to again express my astonishment at the measure of success to which many of the Indian school superintendents attain in providing for the children under their care in accordance with the present law limiting the per capita expense to \$200 a year. What other schools in this country are providing for instruction, board, lodging, clothing, and transportation at any such rate? Under existing conditions and in view of the cost of all supplies the figure is absurdly inadequate. The superintendents are too often obliged to conduct their schools, as things now are, under

most hampering and even humiliating conditions. If there are weaknesses and faults in the schools it is more owing to the parsimony of Congress than to any lack of industry or skill on the part of those who directly administer school affairs.

The plant at Mount Pleasant is reasonably good, but certain improvements ought to be promptly provided. The primary need is for a new heat and power plant. The boilers are worn out and have been patched to the limit of their endurance. It looked to me as if the school might have to close at any time because the boilers might lie down on the job. A new power plant should be built on the newly acquired land across the road to the east of the school buildings. This will not only provide for safety but it will also make for economy. At present all the coal has to be hauled by team from the railroad, but by building the plant across the road a spur track can be run in and the coal transferred directly from the car to the coal pocket. This site will also make for the comfort of the entire school population. The prevailing wind in central Michigan is from the southwest. The present power plant is so placed that the smoke blows directly over and through the school-houses and dormitories. Building the new plant across the road will mean that the smoke will go harmlessly down the river valley. The superintendent has been assured by the Indian Office that consideration will be given to this need and provision presumably made in the Indian bill of 1921. This seems an unnecessary and somewhat reckless delay. Disaster may occur at any moment at Mount Pleasant. Urgent representations should be made to the congressional committee to secure an appropriation of \$25,000 in the Indian bill, which will be under consideration at the special session of Congress.

The new gymnasium at Mount Pleasant is a great help to the work of the school. The dairy barn, which is nearly completed, is also an excellent structure. The domestic science cottage, well designed and well built, is doing an admirable service. The electric pump gives security to the water supply. Even if the boilers break down the pump can be continued by the use of the city electric power. The superintendent has been skillful in improving the grounds and laying concrete walks. The whole plant presents a pleasant and agreeable appearance.

The completion of the dairy barn should be followed by the removal of the old barn to the end or side of the new barn, where the buildings can be set at right angles and a courtyard thus formed for the stock. The present barn is altogether too near the dormitories. I commend the suggestion that plans should be formulated to build a new hospital across the road and then make over the present hospital so as to provide a dormitory for the smaller girls.

The boys and girls of this school find ready employment near their homes at good wages. With the restoration of the four years' vocational course this school can be depended upon to help make the new generation of Michigan Indians into self-respecting and self-reliant citizens.

Respectfully submitted,

SAMUEL A. ELIOT,
Member, Board of Indian Commissioners.

APPENDIX K.

REPORT ON THE SHAWNEE INDIAN SUPERINTENDENCY, OKLA.,
BY WILLIAM H. KETCHAM.OKLAHOMA CITY, OKLA., *January 1, 1919.*

SIR: I visited the Shawnee Superintendency, Okla., on October 7, had a conference with the superintendent, Ira C. Deaver, and superintendency officials, visited the school and met a delegation of Potawatomi Indians and a delegation of Shawnee; although invited to council, the Kickapoo did not appear. This superintendency is for three tribes, to wit, Absentee Shawnee, 538; Citizen Potawatomi, 2,288; Mexican Kickapoo, 212. All are allotted, and hence the questions of the superintendency are mostly administrative.

Potawatomi.—The Potawatomi were chiefly concerned about various claims which they think they have against the Government. Their specification of these claims was very indistinct, and to my mind it appeared in a number of instances they misunderstood the language of the treaties. J. G. Lydic, an attorney of Shawnee, has a contract, approved by the department, for the determining of these claims. The Indians contend, however, that he is inactive, and they want a new attorney. Certainly it would be well if action were taken on these and other Indian claims which would bring about a final decision one way or the other. The policy of permitting Indian claims, either real or imaginary, to lie undetermined has the effect of keeping the Indians in constant expectation of receiving funds and invites their exploitation by attorneys who in many instances make a specialty of delving into vague Indian claims. If all Indian claims could be taken up and disposed of finally a great step forward for the Indian's progress and his peace of mind would be made. The affairs of the Potawatomi are practically closed, but they will never realize this so long as a positive pronouncement has not been made, and for this reason I recommend that an attorney be appointed and approved by the department who will pursue their claims to a final determination.

Shawnee.—I conferred with Little Jim and representatives of his particular band of Shawnee. Little Jim claims that the Shawnee have property in Mexico and he and others believe that it would be better for the Shawnee to remove to Mexico, where they may live the Indian life and keep up their traditions. It would appear that some of the Shawnee desire to follow the course pursued by certain of the Kickapoo who some years since removed to Mexico. I was unable to determine, from Little Jim's statement, whether this desire to go to Mexico originated with the Shawnee or whether they had been persuaded into the idea.

A grave complication has arisen which affects the title of a number of Shawnee allotments. A schedule of these particular allotments, dated August 7, 1891, was approved by the Secretary of the Interior, September 6, 1891, and deposited in the General Land Office, February 6, 1892, on which date trust patents were issued to the allottees. Sometime before the 25-year trust period had expired, the superintendent for the Shawnee, believing that a number of the Indians involved in this schedule were incompetent, endeavored to have the

Indian Office secure an extension of the trust period by the President for 10 years. There was some delay in the issuing of this order which seems to have been occasioned by a delay in the determining of the competency of certain of the Indians in question, and the order by the President was issued only on November 24, 1916. There are certain parties who contend that the trust period began September 6, 1891, the date of the approval of the allotments by the Secretary of the Interior, and expired 25 years thereafter, to wit, September 6, 1916, and that in consequence the Executive order issued on November 24, 1916, is null and void. Acting on this theory they are buying the lands of the Indians at ridiculously small prices and taking deeds thereto. A former employee of the Indian Office, Washington, D. C., now residing in the town of Shawnee, is said to be particularly active in these purchases. The Government contends that the trust period began February 6, 1892, the date on which the trust patents were issued, and that it expired 25 years thereafter, to wit, February 6, 1917, and that consequently the Executive order of November 24, 1916, is valid.

This contention was tested in the District Court for the Western District of Oklahoma and that court held with the Government; but the United States Circuit Court of Appeals reversed the decision of the district court. The Solicitor General, on behalf of the United States, then filed a petition for a writ of certiorari in the Supreme Court of the United States. This writ has been granted, and the superintendent and the Indians involved are awaiting the final decision with much anxiety.

The Mexican Kickapoo.—The superintendent evinced much concern in regard to the following situation: The trust period on 280 Kickapoo allotments in Oklahoma will expire not later than October 5, 1919, and on 163 allotments not later than July 14, 1920, twenty-five years from the date of the issuance of patents. Prior to the expiration of the trust period the competency of restricted Kickapoo Indians in question will be investigated as a basis for determining just which allottees are competent and should be released from governmental guardianship and for just which allottees the trust period should be extended. It is important that this work of determining competency be completed in ample time so that the Executive order may be issued on such a date that no question can arise relating to these Kickapoo allotments such as has arisen in regard to the Shawnee allotments above mentioned. This is a very important question and the department should pursue a course which will obviate any occasion for litigation in regard to these Kickapoo allotments.

Shawnee school.—The school, which has a capacity of 110 pupils, was in good order and some of the departments were excellent. The superintendent, because of war conditions, was endeavoring to make necessary repairs, alterations, and additions without calling on the Indian Office for an extra allowance, which was very commendable on his part.

Respectfully submitted,

WILLIAM H. KETCHAM,

Member, Board of Indian Commissioners.

HON. GEORGE VAUX, JR.,

Chairman, Board of Indian Commissioners.

APPENDIX L.

REPORT ON THE SEMINOLE INDIANS OF FLORIDA. BY SAMUEL A. ELIOT.

BOSTON, MASS., *March 15. 1919.*

THE CHAIRMAN, BOARD OF INDIAN COMMISSIONERS.

SIR: In pursuance of your instructions I have visited southern Florida and given consideration to the affairs of the Seminole Indians.

I may say at once that I have not seen any Indians. Most of them live in the recesses of the swamps many miles from civilization. They are exceedingly shy and elusive and have very little command of any language but their own. It would have taken me a fortnight to have penetrated the wildernesses where they live, and had I succeeded in discovering any Indians I could have had very little communication with them. On the eastern coast, southwest of Stuart, there is a community known as Indiantown, or as the Cow Creek Band, and there are two or three Indian camps adjacent to the winter resorts, but these people evidently go to the neighborhood of Miami or Fort Lauderdale largely for show purposes and do not represent the condition and spirit of the tribe. The members of the congressional committee who investigated Seminole affairs in 1917 found the camps abandoned and were able to secure testimony from only two young Indians.

I have conferred with the superintendent at Fort Myers and with a considerable number of traders, guides, and hunters who have had some contact with the Seminoles. I have also conferred with officers and members of the Society of the Friends of the Seminoles and with the officials in charge of missionary interests.

It is not necessary, for the purpose of this report, to go into a long history of the Seminole situation or to tell how these people came to be driven into the tangled swamps and everglades of southern Florida. Enough that they have been living there for some three generations, supporting themselves by hunting, fishing, and primitive agriculture.

How many Seminoles there are in Florida no one knows. The statistics of the Indian Office indicate a population of 585. That is, however, purely an estimate and I have not been able to form any opinion as to its accuracy. Some of the hunters with whom I talked were sure there were not more than 25 or 30 families in all the vast wilderness. Others say vaguely and generally that there are about 600 Indians living in the cypress swamps or on the edges of the drowned prairies known as the Everglades. The other statistics about Seminole property and earnings and the like, given in the Annual Report of the Commissioners of Indian Affairs, are also, for the most part, guesses. The Indians live in small detached camps or isolated family groups and are continually moving. It is practically impossible to secure any accurate information about them. Occasionally a hunter will bring his pelts out to market at Fort Myers or Miami, or to some trader's store, but his English is very limited, and if he knows much or anything about his neighbors he will not tell.

The Episcopalians and Baptists have more than once attempted to establish missions among these people but without any success. The Seminole has been so badly treated, and has inherited so poor an opinion of white men generally that he has very little use for the white man's religion or the white man's civilization. In his experience the white man's way is the way of treachery, avarice, and cruelty. He has always been self-supporting after his own fashion and his limited needs are sufficiently supplied. Save for his gun, his ammunition, and a few bolts of cotton cloth, he has practically no need of contact with white folks. It is understood that when white people appear in the spongy lands and winding lagoons that make up the Seminole domain the Indians silently disappear.

Under these conditions the work and functions of an Indian superintendent are particularly embarrassing. He must patiently endeavor to establish confidence and to win these reticent, suspicious, elusive Indians to trust him. This is necessarily a very slow process, for the Indians live far apart in a wilderness of great extent, exceedingly difficult to penetrate. The interior basin of southern Florida is a kind of shallow sea in which rise thousands of low islands or hammocks, some covered with a forest growth and more by a tangle of shrubs and vines and palmetto scrub. The Indians live for a few months, or perhaps a year or two, on one of these islets and then drift to another. They must be dealt with almost one at a time. The barrier of language remains almost unsurmountable. I could discover only one man fit to be an interpreter. He is the son of a trader who has had considerable contact with the Indians and he now is in the Government employ. It is idle to urge that schools should be established for these people, because no children could now be secured for such schools unless they were kidnapped. It is supposed to be part of the tribal law for the Indians to have as little contact as possible with white people.

These facts account for the small apparent progress made by the Indian Bureau and its representatives during the last 50 years. My own impression is that a good deal of needless and rather sentimental interest has been wasted on these people. They are not asking for help. They are living harmless lives and taking care of themselves. They represent, indeed, a very primitive kind of existence, but I do not discover any reason why the United States Government should insist that they must live in frame houses or wear so-called citizens' dress or eat canned goods. I think that even if these things were required of them they would find means of evading the requirements.

The United States Government holds in trust for these people some 24,000 acres divided into a number of separate tracts. The largest tract, southwest of Lake Okeechobee on the edge of the Everglades, contains some 17,000 acres and is generally spoken of as the Seminole Reservation. On the eastern coast, back of Stuart, is a tract of some 3,000 acres. The rest is in small parcels. Most of these areas are practically under water in the wet season and only the occasional little islands or "hammocks" are possible for farming.

The State of Florida has set aside in Monroe County a tract containing some 98,000 acres for the use of the Seminoles. I have not found any one who has actually been over this territory. I have

interviewed persons who have seen it from the waterways of the gulf side. Their testimony is to the effect that as far as the eye can reach the tract seems to consist of mangrove swamps. It is probable that in so large an area there are some islands of real land, but whether this tract will ever be of any use as a dwelling place for the Seminoles is still problematical.

Superintendent Brandon is doing his best with a very difficult situation. He at first established an agency at Miami but after remaining there six months decided that the best way to get into the Seminole country was from Fort Myers. He has been very assiduous in getting acquainted with the Indians, and has lived so much in the swamps that his health is now quite seriously impaired. He plans to gradually develop something of a community center on the large tract known as the Seminole Reservation. He has had the tract surveyed and correct lines run, and he is now preparing to fence. The wire is in storage at Fort Myers, and the Indians, or as many of them as are ready to work, are cutting the posts. A house is being constructed for the superintendent on a dry place on the reservation. This is not a frame house, but an Indian house, consisting of posts with a palmetto thatch. This shelter will be used by the superintendent on his excursions to the reservation, and also as a kind of community house, where he can confer with the Indians.

The next step is to get a little trading store open at the same location so that it will become natural for the Indians to come in to do their trading, and to confer with the superintendent. In course of time a school and hospital may be developed, but nothing of that kind can wisely be provided for some years to come. The road to the reservation has now been put into fairly good condition as far as Immokalee, where there is the highest point of dry land and a small settlement, and for the rest of the way it is passable in dry seasons.

When the fencing has been completed it may be possible to develop a small cattle-raising industry on the reservation. The cattle I saw in southern Florida were poor and thin. The forage is evidently very meager. Nevertheless, these cattle are acclimated, and I suggest that 200 cows might be purchased and placed on the reservation and then bred to bulls imported from a healthier stock. It should, however, first be determined whether there is enough grazing land on the reservation to sustain even a small herd. The Indians might then be encouraged to acquire small herds of their own, distinguished by an individual brand. This may provide an industry for the Indians and facilitate the gradual transfer of their means of livelihood from hunting to a more permanent source of supply. For the present it is probable that the Indians can continue to sustain themselves as they have for generations past, but the time is not far off when the game will be exhausted and the Everglades more or less drained, and the Indians will be obliged to adapt themselves to a different mode of life. It is therefore probably wise to begin to build up a cattle industry if it proves to be possible for cattle to live on the reservation.

It is understood that a bill is to be introduced into the Florida Legislature providing for the cession to the United States Government of the State tract held for the Indians. Whatever are the motives behind the bill, it is obvious that the welfare of the Indians

will be promoted by its passage, for it will bring all the tracts held in trust for the Indians under the single control of the Federal Government, and if the State reservation has any value it can in due time be developed as a possible home for Indian families.

In my judgment the worst peril now threatening the Seminoles is that of increasing contact with the whites. Left to themselves they are doing pretty well, after the ways of a very primitive people. They are proud, honest, independent, and healthy. The superintendent is handling things wisely, but it is to be feared that sentimental people may, in their endeavor to uplift these primitive folk, impair their physical and moral vigor. Already there are some signs of the unhealthy paternalism which has robbed so many Indians of individuality and initiative. I can see no reason why the United States Government should, for example, pay a dentist's bill for a Seminole Indian. That robs him of his self-respect, for he is perfectly able to work and earn for himself the amount of that bill. I do think that the superintendent did right when, during the influenza epidemic of the last winter, he brought five Indians out of the swamp to the hospital at Fort Myers and gave them medical attention. That was an act of plain humanity and did not unduly pauperize the Indians. I believe that the Government should, as a rule, refrain from too much supervision and from futile attempts to control these Indians. It will not help them to offer them free transportation on a Government steamboat. Let them, as far as possible, pole along in their own canoes.

Respectfully submitted,

SAMUEL A. ELIOT,
Member, Board of Indian Commissioners.

APPENDIX M.

REPORT ON THE EASTERN CHEROKEE RESERVATION, N. C., BY SAMUEL A. ELIOT.

BOSTON, MASS., *March 26, 1919.*

THE CHAIRMAN OF THE BOARD OF INDIAN COMMISSIONERS.

SIR: In accordance with your instructions I have visited the reservation and school of the Eastern Cherokees and beg to report as follows:

I am glad to be able to report that most of the recommendations for the improvement of the school plant, contained in Commissioner McDowell's report of January, 1917, have been carried out. Too much praise can not be given to the efficiency and economy with which Supt. Henderson has introduced these improvements. Six neat and adequate cottages for employees have been built since Commissioner McDowell's visit. A doctor has been provided and carries on an enlarging work in the well-equipped hospital. A new assembly hall, with a gymnasium in the basement, is now in course of erection. The industrial building for the boys, recommended by Commissioner McDowell, is planned and the material ordered. It will be built in the coming spring and summer. There is still urgent need of a new horse barn, for the old structure is fast rotting away.

Two improvements that have been recommended and approved need to be pushed to completion.

(1) It is understood that an appropriation of \$8,000 for the construction of a bridge over the Ocono Lufly River, just below the school, is provided for in the Indian bill, which will presumably be enacted at the special session of Congress. The ford is not passable at periods of high water or when the river is blocked with ice. During the severe winter of 1918 the school was for some time cut off from its fuel supplies, which are brought up on the lumber railroad across the river.

(2) There is still urgent need of additional land for the school farm. The Government is now renting certain adjacent lands, but they should be promptly acquired and title taken by the Government. Additional land should also be secured on the hillside above the school, whence the water supply comes. Several Indian families are now living on that hillside and the purity of the school water supply is imperiled. It is understood that the Department of Justice has ruled that the Indians can not sell their lands or improvements except to Indians. This decision has stopped these necessary adjustments. The validity of the decision should promptly be tested.

In addition to Commissioner McDowell's recommendations for improvements at and about the school I feel the need of—

(1) A domestic-science cottage, where the girls can receive training in household work.

(2) A separate dormitory for the little boys. They are now very much crowded in one room of the boys' dormitory.

(3) An additional ward for the hospital, to provide for maternity cases. The Indian women are increasingly utilizing the facilities of the hospital and the skill of the physician.

(4) As at all schools, in a rainy or muddy country, there is need of more concrete walks.

It is probable that all of these needs can be taken care of in the next two years. Supt. Henderson is very careful and thrifty in ordering his building material and in utilizing available labor.

The Eastern Cherokees are a healthy and self-supporting people. They are much freer from disease than most Indian communities and they have very little access to liquor. Their moral standards are good and they are fairly industrious. Most of them live in log cabins, but the cabins are clean and well kept and sufficiently furnished. There are a few frame houses on the reservation and a good many prosperous-looking farms and gardens. There is little or no real destitution. The standards of comfort are as good, if not better, than those of the neighboring white mountaineers. There are nine Baptist churches and one Methodist church on the reservation, all with Indian preachers. All of the Indians wear citizen's clothes. Most of them both speak and write English and a good many have traveled more or less.

These Indians are citizens of the State of North Carolina and are subject to State laws. They vote or can vote if they want to; they pay taxes; they work on the public roads; they carry the ordinary responsibilities and privileges of citizenship.

There exists, however, a curious duplication of jurisdiction. While the Indians are citizens of the State the agency and school are administered by a Federal officer. The Federal superintendent also handles

the individual moneys of the members of the tribe, and the tribal funds can not be checked out without his consent. On the other hand, he has no control over the movements of the Indians, who, as free citizens, can come and go as they will. He has no police authority, and the enforcement of the laws and prosecution for crime is in the control of the State authorities. In the hands of a superintendent less trusted or less discreet than Mr. Henderson these somewhat complicated adjustments might work badly.

The largest and most immediate problem confronting the Eastern Cherokees concerns the settlement of these conflicting jurisdictions and the elimination of the curious arrangement by which the lands of the Eastern Cherokees are owned and administered. The titles to these lands are held, not by the Government, but by a corporation known as the Eastern Band of Cherokee Indians of North Carolina. This corporation owns lands in four different counties in the mountain region of North Carolina. The reservation proper, known as the Qualla Boundary, is located in Jackson and Swain counties, and contains something more than 50,000 acres. In Cherokee and Graham Counties there are a number of isolated tracts with a total area of some 9,000 acres.

A few Indians live on these tracts but the majority live on the Qualla Boundary, holding their lands as tenants in common. This curious situation has the effect of discouraging the Indians from making any substantial improvements, building modern houses or adopting improved methods of farming.

The situation is still further complicated by the fact that several hundred men and women, called by the Cherokees "white Indians," and who do not live on the reservation, claim to be members of the tribe and appear to possess some right to a share of any land and funds the tribe may own. The tribe now owns a fund amounting to \$140,000, representing the proceeds of sales of land and timber in former years.

After a careful study of this situation I am prepared to recommend the following course of action:

- (1) Let the corporation sell the tracts in Cherokee County, the 3,000 acres south of the railroad at Ela, or such part of these lands as may be necessary, and with the proceeds, added to the existing tribal fund, buy off all of the claims of the "white Indians" so that the tribal rolls can be cleared up and substantiated.

- (2) Then let the corporation deed all of its remaining lands to the Government and dissolve as a corporation.

- (3) Then let the Government, through the agency of an impartial commission, allot the lands of the Qualla Boundaries to the Indians in severalty, giving each Indian a due share of arable, grazing, and timber land.

- (4) Let the Government continue for the present, or for a fixed term of years, its responsibility for the schools and maintain the boarding school in complete efficiency, taking as a kind of sinking fund for the partial or complete payment of the cost of maintenance, the unallotted and unsold lands. The State of North Carolina, in lieu of its immunity from educational expenditures, should agree to remit taxes upon these lands.

- (5) Let there be established, under Government initiative, and if necessary with Government aid, a corporation to be composed of com-

petent Indians, together with the superintendent, the school farmer and a few other interested white men, which shall build and conduct a canning factory near the agency. This would provide an industrial center, encourage the Indians to raise fruit and vegetables, and it could readily be made a good investment.

In his report of January, 1917, Commissioner McDowell pointed out the possibilities of a canning factory. The Indians are already decidedly interested in agricultural developments. The agricultural fairs held in recent years have been very successful. The soil and climate are well adapted to the raising of garden truck and orchard fruit and there is a good and ready market for vegetables, fruit, and poultry products. Apple, plum, and cherry orchards flourish, and great quantities of berries grow wild on the hills. A canning factory could evidently be kept in operation most of the year. It could probably supply nearly all the vegetables and small fruits needed by the Indian schools all over the country.

The arguments that can be brought against this way of disposing of the land problem are sufficiently obvious.

(1) It will be argued that things are well enough as they are and need not be disturbed. That is the argument of laziness. It will certainly be easiest to let things drift along. It is true that things are in pretty good shape on this reservation, but they will never be any better until the desire of the Indians for allotment is gratified. The present conditions distinctly discourage progress. Where a desire for the possession of personal property exists among Indians it certainly ought to be encouraged.

(2) It will be pointed out that if the lands are allotted they ought to be held under a Government trusteeship for a term of years, so as to prevent injudicious selling on the part of the Indians. That suggestion will further have the advocacy of certain Indians, who perceive that if the allotments are restricted they will be relieved of the payment of taxes. On the other hand, such an arrangement will deprive the Indians of their rights as citizens and put them in the restricted class. That would be a step backward rather than forward. I am clearly of the opinion that these Indians should be thrown more upon their own responsibility.

(3) It will be held that if the lands are allotted without restriction or trusteeship the less competent Indians will promptly sell their allotments and a class of undesirable white people may acquire rights on the reservation and imperil the welfare of their Indian neighbors. The plan I propose will doubtless mean that some of the less competent Indians will suffer loss through their own folly or thriftlessness and it will mean that some new perils will have to be encountered. Such risks attend every advance. The alternative is to stand still or go backward. This plan of action will encourage initiative, make possible permanent improvements in lands and buildings, continue the present educational privileges without undue expense, provide for industrial occupation, and gradually fit the Indians to take their places in a democratic State in full partnership with their white fellow citizens.

Respectfully submitted,

SAMUEL A. ELIOT,
Member, Board of Indian Commissioners.

APPENDIX N.

REPORT ON THE PAPAGO INDIANS, ARIZONA, BY MALCOLM McDOWELL.

SELLS INDIAN SCHOOL, ARIZ., *April 8, 1919.*

SIR: Following is my report on the Papago Indians of southern Arizona. The survey of conditions on the reservation began on my arrival at Sells (formerly Indian Oasis), the agency headquarters, March 15, 1919, and continued until April 8. During that time I visited all parts of the superintendency and held several councils with the Indians.

The headquarters of the agency had been moved from San Xavier to Sells, 50 miles southwest, but a few weeks previous to my visit. This change brings the superintendent and physician to the center of the Indian population. The moving of the agency to Sells was in line with recommendations repeatedly made by Commissioner Eliot and former Commissioner Ayer and is highly satisfactory to the Indians.

The new agency plant occupies a little plateau at the foot of a hill and is on the main road from Tucson to Ajo and near the converging point of the principal roads to the north, west, and south which lead to the bulk of the Indians. The buildings, of adobe, are well constructed and of pleasing architecture. They include the office of the superintendent, his home, a day school, homes for the physician, clerk, stockman, and other employees, a warehouse, shop, and like buildings. A small electric plant furnishes light. Water is obtained from a well, equipped with a gasoline engine, and is piped to the houses and school. A site has been selected for a hospital, and, it is believed, sufficient water can be developed to meet all requirements, although when I was there the water problem was a source of much anxiety.

Supt. Thomas H. McCormick is rapidly becoming acquainted with his Indians and the reservation. He has been in charge but little over a year. The Papagoes told me Mr. McCormick was a "good man" and they seemed to like him and his ways. I was much pleased with the friendly atmosphere of the agency and the kindly spirit which seemed to animate Mr. McCormick and his staff.

My investigation of conditions on the reservation lead me to offer several recommendations and suggestions with the full realization that their adoption would call for a considerable expenditure of money. But they are in line with the reservation equipment and development program of Commissioner Sells, who worked against great odds in having this large area set apart for the nomadic Papago Indians and who, therefore, is more than ordinarily interested in those fine Indians. My recommendations are:

(1) The building of the hospital at Sells should begin as soon as possible and be pushed to completion.

(2) A boarding school, with a capacity, at least, for 250 students should be built on the reservation as soon as an appropriation for that purpose can be secured. This school should be equipped and organized to give the Papago children the kind of an academic, industrial, and agricultural education best suited to Papago conditions and environments.

(3) Three more day schools should be built and put to work quickly.

(4) Sells should be connected with Tucson by a telephone line.

(5) A trachoma specialist, with enough assistants to conduct an aggressive campaign, should be detailed to the Papago Reservation, with orders to eradicate trachoma from the jurisdiction.

(6) Deep-well pumping plants should be installed at Big Fields, Tecolote, halfway between San Miguel and Topowa, Iron Pipe, Burros Pond, Ventana, Black Butte, and in the Pacinimo Valley for live stock and domestic uses.

(7) Decent and comfortable living quarters should be provided for the Irrigation Division employees at San Xavier and other points.

(8) Some method should be devised, in line with a progressive policy of helping the Indians to help themselves, to supply the Indians with enough good bulls, stallions, and jacks to enable the Papagoes to improve their live stock; to supply each village with scrapers to encourage the Indians to build more "charcos" or storage ponds for water for their stock and to help individual Indians get doors, shingles, corrugated iron roofing, and other building material for the improvement of their homes.

As justification for the above recommendations I offer the following narrative report of my survey:

The Papago country lies in Pima and Pinal Counties, Ariz., with its southern boundary resting on the United States-Mexico international line. Most of the land set aside for the Papago Indians is in Pima County and is under the jurisdiction of Supt. McCormick, of the Papago Reservation. The Indians and land in Pinal County to the north are under the supervision of Mr. William F. Haywood, superintendent of the Pima Indian Reservation, with headquarters at Sacaton, on the Gila River. The Papago country extends from Tucson to Ajo, 135 miles to the west, and from the Mexican line to the Pima Reservation, 100 miles to the north. A number of Papagoes live just across the line in Mexico and in the northern part the Papagoes and Pimas are close neighbors. They say that in the "long ago" the Pimas and Papagoes were the same tribe.

The Papago Reservation, which is that part of the Papago country under the jurisdiction of Mr. McCormick, with a population approximating 5,000 and an area around two and three-quarter millions of acres, lies in two parts; the old San Xavier Reservation near Tucson, with an area of 7 by 15 miles, which is occupied and used by the agricultural Papagoes, and the "desert" reserve which, up to a few years ago, was public domain land and which is occupied and used for grazing cattle by about 4,500 of the so-called "nomadic" Papagoes.

At San Xavier about 1,500 acres of good farm land are irrigated and every acre under ditch is cultivated by the industrious Indians. All of this irrigated land is allotted. The "nomadic" Papagoes "dry farm" about 16,000 acres in the Papago desert, in small patches. "Dry" perfectly describes the character of the farming—it is doubtful if agriculture is adventured under more adverse conditions than obtain in this land. With a persistence which years of repeated disappointment have failed to discourage, the desert Indians continue

to force the arid land to yield wheat, corn, beans, melons, and other produce. These Indians are called "nomadic" because when their "charcos" or artificial ponds become dry they move to the mountains, where there is more water and better grass. In the spring they return to the flat country to prepare their farms for the summer rains, upon which they depend not only for their crops but for the water supply which is caught and stored in the "charcos."

The original Papago Reservation at San Xavier, named after the old Spanish mission which was founded there about 225 years ago, was set aside for the Indians by Executive orders in 1874 and 1882. In February, 1917, the desert public domain which now is included in the Papago Reservation was set aside for the nomadic Papagoes. To meet the public demand for an easement for a road from Tucson to Ajo, which is the center of an important copper-mining industry, a strip about 6 miles in width was not included in the Executive order and a number of townships occupied and used by the Santa Rosa ranch also were excluded. These exceptions divided the desert reserve into three parts—thus the Papago Reservation is composed of four sections, the principal and largest abutting on the Mexican boundary.

This Papago country is called a "desert." In the sense that the natural water supply is almost nothing, that there are no living streams in it, that water holes are infrequent, and far apart, it is a desert. But at all times of the year the desert vegetation grows profusely; the country is covered with cactus, greasewood, mesquite, pala-verde, weeds, shrubs, and flowers peculiar to semiarid lands, and after the summer rains, the six weeks' grass clothes the ground. It then is difficult to realize that it is a waterless land—a desert.

Mountain ranges, running generally north and south, with cross spurs, break the reservation into well-defined valleys. The Baboquivari Range, with its principal peak rising 7,740 feet, lies to the east of the desert reserve, and the western limit is marked by the Ajo Range. The Coyote, Comobabi, Santa Rosa, Artesa, Mesquite, and Quijotoa Ranges lie between the Baboquivari and Ajo Ranges. Many of the mountains are mineralized and well plastered with mining claims. There are about 10 small producing mines which ship high-grade gold, silver, copper, and lead ores to Tucson by wagon—long hauls which give a number of Indians fair wages occasionally. A number of prospectors continually search the mountains for mineral indications. At present the Quijotoa Mountains are the favorite hunting grounds of the prospector. The hope of the miner and prospector is that a railroad will be built across the reservation which will give them an outlet for their low-grade ores. They claim such a railroad will develop copper mines equal to the Ajo mines.

When the reservation was created by Executive order there were many mines and claims in the mountains and the right to prospect, file claims, and mine for metalliferous metals was not taken away. When a mining claim by due process becomes patented land the 17 acres in the grant are taken out of the reservation. Before the reservation was made there were a number of Indian trading stores located on patented lands which, of course, were not included in the Executive order. Hence there is this interesting situation: Traders who deal with Indians within an Indian reservation who are exempt from the rules and regulations required of licensed Indian traders. There is

but one licensed trader on the reservation. Supt. McCormick and the Indians told me the traders generally were fair in their dealings with the Indians.

The Papago Indians live in villages, of which there are nearly a hundred, each composed of from 4 to 30 houses. Villages are located with reference to the lay of the land and the character of the soil. Water for stock and domestic purposes is the prime requisite, and a "charco" for the impounding of surface water is part of every village. The engineering instinct of these desert people is remarkable. With unerring precision they select a site for the artificial pond, build dikes and ditches to trap the water and lead it to the "charco," which may cover several acres.

The same engineering instinct leads them to select farm areas in the flats to which the surface water, deposited by rains, is directed by dikes and ditches, to the end that each farm shall receive a good soaking at least once a year. The dikes, dams, canals, and ditches are constructed in accordance with the best modern hydraulic and irrigating engineering practices, and these practices were employed by the ancestors of the present desert denizens centuries ago. One of the engineers of the irrigation division of the Indian Service told me that the Papagoes had nothing to learn from white men in the conservation of surface water.

Each village is a little government of itself. One of its men is elected or selected by common consent as headman for his village. Leadership qualities generally guide his neighbors in selecting the headman. His authority seems to rest entirely upon personality. If he is a natural leader, a masterful man, he exercises considerable authority. If not, he acts merely as a counselor, adviser, and peace-maker, and his authority is limited by the willingness of his people to follow his suggestions or decisions. Thus the Papagoes are a people divided into little self-governing communities. There do not seem to be any tribal relations of an organized character. There certainly is no tribal chief and the older Indians say there never was one. Occasionally a strong personality becomes the principal man of the tribe, but he is neither an elected or hereditary chief. One village by reason of the aggressiveness or progressiveness of its people may dominate a section of the country and consequently its headman becomes the principal man or leading citizen of that section.

In the southern part of the reservation, adjacent to the Mexican line, the Indians are more advanced, more progressive, more alert, and quicker to take hold of new things than the Indians in other parts of the reserve. There are more houses with corrugated-iron or shingle roofs, with two or three rooms, with wood floors, with windows and porches, in the southern part. There are seen more stoves, beds, sewing machines, scrubbing boards, better stock, and more road improvements. The Indians of the south are building miles of straight roads whose lines were run without instruments with amazing accuracy.

They are a courteous people, these Papagoes, kindly and well disposed toward white men. History proves they never were at war with the white men, but rather that they, with the Pimas, ever were ready to aid their white friends against other Indian tribes. There is but little difference in looks, dress, houses, mode of living,

and speech between the Papagoes and Pimas, though the Papagoes are desert and the Pimas are river Indians. Cleanliness is a tribal virtue. I traveled hundreds of miles, going from village to village, and was welcomed into many homes, and a dirty, slovenly house was a rare exception. Supt. McCormick and Dr. Anderson, the agency physician, directed my attention to an interesting fact—the children whose parents had gone to some Indian school were better dressed and generally neater in their appearance than were the children whose parents had never attended a school, and though most of the houses and premises were clean and neat those of the “returned students” always were. I did not see an untidy “returned student” home.

In all villages the family wash, on the clothesline, was a common sight. Bearing in mind that thousands of Papagoes carry water at some periods of the year from wells or “charcos” miles distant from their homes, that water is the most precious thing in the desert, the cleanliness of the Indians is remarkable. White women told me that Papago women can wash clothes white in muddy water. All Papagoes wear the clothing of white people, adorned, of course, with colored ribbons and Indian jewelry. There are no “blanket” Indians on the reserve. No Papago receives rations from the Government; the tribe has no funds in the hands of the Treasurer of the United States, and therefore there are no pro rata payments eked out to encourage indolence. Only 91 Indians, almost all of whom live on the irrigated San Xavier Reserve, have been allotted and have received trust patents. There is no tribal herd, no tribal forest or tribal gas, oil, or mineral lands.

The Papagoes are an unspoiled people, independent, self-reliant, capable of rapid advancement, intelligent, moral, quickly responsive to friendly advances, willing to learn new methods. They are reliable and preferred workmen, and if the tribe is helpfully aided in education, water, health, and live-stock improvement and subjected to the minimum of Government jurisdiction and supervision and that only of the helpful kind, there is little question that within a generation the Papago Indians will be self-supporting citizens of the United States and Arizona, respected by their white neighbors and a most valuable national asset.

Because until recently over 85 per cent of the Papagoes lived on the public domain and were therefore nonreservation Indians, the figures representing population are but approximations. Supt. McCormick is taking a census of all the villages and accurate population totals will be available after June 30, 1919. But the estimated population of 5,237 is practically correct. The Indians are divided into about 1,500 families, all living in permanent houses of adobe construction. There are no shacks, tepees, or wickiups on the reserve excepting what are put up occasionally for temporary use. The Indians have two homes; those in the villages in the flat country near their fields and “charcos,” and those on the higher elevations, the mountains and foothills, to which they go when water gives out in the flats. The rainfall is greater in the mountains and high plains, the grass and browsing plants are thicker, but the soil is not so well adapted to agriculture.

When the dry season is on, the plains villages are deserted. For two years there has been an abnormal drought, worse in the northern

part of the reservation. Santa Rosa, 40 miles north of Sells, is one of the largest of the villages, but the drought caused complete crop failure and dried up all the stored water, and the Santa Rosa Indians were forced to find work in the mines and cotton fields. When I was there in the early part of April only seven children were in the day school. The rest were with their parents in Ajo, where the fathers worked in the copper mines or in the cotton fields of the Gila and Salt River Valleys to the north. We passed through many of these deserted villages whose people had moved to the mountains, taking their cattle with them.

The Papago Tribe is practically 100 per cent full blood. It is estimated that only about 10 per cent understand and speak English, but many of the Indians speak Spanish or, rather, Mexican. A number, how many is not known, live in Mexico. Cattle from the reservation cross the line and stray far into the neighboring Republic, and the Indians go into Mexico to "round-up" their cattle and ponies. So far as the Papago Indians are concerned there is no international line; they pass back and forth freely without passports, border permits, or interference. Attempts were made by German propagandists in Mexico to incite the Papagoes against the United States but without success, for the Indians are loyal to this country. A number of young Papagoes enlisted in the Army and served with distinct credit.

For more than two centuries the Franciscan Fathers have maintained missions in the Papago country and it is estimated that over four-fifths of the tribe are Catholic; the balance are Presbyterians, for that church has been active in mission work in this field. Three Presbyterian and 6 Catholic missionaries attend to the religious welfare of the Indians. There are 5 Presbyterian and 11 Catholic churches on the reservation and the church bodies maintain 5 Catholic and 1 Presbyterian day school for the Indian children. Near Tucson is a large, well-equipped, and effectively administered Presbyterian boarding school for Indians.

Generally speaking, I found health conditions were good. Tuberculosis is present but not prevalent, for these Indians work and sleep much in the open air, and Arizona's dry air is justly famous for its beneficial effect upon the tubercular afflicted. Trachoma, however, is on the increase. Several hundred Indians have this eye-destroying malady and the Indians told me the "eye sickness" is rapidly making headway. Last year there were two physicians attached to the reservation, Dr. C. O. Anderson and Dr. S. B. Norris. The latter recently entered the Immigration Service, so there is but one physician to attend to 5,000 men, women, and children scattered over thousands of square miles.

Dr. Anderson is enthusiastic in his work, but neither he nor any other doctor can possibly attend to all the sick and injured on this large reservation, much less devote the time which is necessary to fight the spread of trachoma. If an active campaign against trachoma is started soon and prosecuted vigorously trachoma can be eradicated in this country and hundreds of as fine Indians as there are in the United States will be saved from total blindness. To procrastinate in this matter will allow trachoma to become so prevalent that it will be almost impossible to do more than alleviate the evil. A competent trachoma specialist, with enough skilled aid to conduct a vigorous

campaign against trachoma, should be sent to the Papago Reservation very soon.

Commissioner Sells's reservation equipment program includes the building of a hospital at Sells. The commissioner very wisely refused to go ahead with construction until it was certain the water supply at Sells would be ample for all agency and hospital needs. While there is some doubt that the agency well can furnish enough water for all needs, there seems to be no doubt one or two more wells will bring in the required water. Excepting Dr. Anderson's office and little dispensary, there is nothing approaching a hospital nearer than Tucson, 65 miles from Sells and more than a hundred miles from some villages. The situation calls for the building of the hospital as soon as possible. The Indians at San Xavier are but 11 miles from Tucson, with a first-class hard road between the two places, and Tucson physicians are called upon to care for emergency cases at San Xavier.

Many of the young girls of San Xavier work as domestics in Tucson and are much more exposed to tuberculosis than are their sisters in the desert, for many eastern people seek the tuberculosis cure in Tucson. This probably accounts for the greater proportion of tuberculosis among the San Xavier Indians, although Mrs. Woodruff, the field matron who is kept in Tucson to look after the Papago girls who work there, is careful not to send the girls into white homes where "health seekers" are taken in.

One of the best arguments supporting the board's repeated recommendations that the field matron service be raised to a higher standard and made more effective is found in the work done in Tucson by Mrs. Woodruff. Her little cottage, which is centrally located, is the clubhouse for the Papago girls. It is a combination employment agency, recreation center, rest room, information bureau, first aid for troubled girls, and emergency lodging house. This modest establishment, in charge of a sympathetic, conscientious, and motherly woman, is an influence for good which has won the respect and cordial cooperation of the white women of Tucson. It is just such community centers which ought to be placed in reservations. Through them the women of the tribes could and would be reached and led to improve their homes and better their living conditions, and I am firmly of the opinion that the sooner the Indian women are energized by a progressive influence the sooner the Indian problem will be satisfactorily solved. And Indian women can only be reached through other women.

The latest available figures show there are over 1,200 children eligible for school attendance on the reservation; that only 563 attended school last year and 690 did not. The total school capacity on the reservation and in the Government day school and Presbyterian boarding school at Tucson is only 522, or 41 less than the total number of children who attended school. A number of children were sent to nonreservation boarding schools. It will be seen, then, that 55 per cent of the children who could go to school did not, and that the total seating capacity of all schools is but 41 per cent of the number of possible school children. This sad condition certainly does not offer a promising future to the young Papagoes.

The educational poverty of the Papagoes is apparent to anyone who goes over the reservation. To meet, in a day's ride, with a

young Indian who can speak English is an event. One day we tested over 20 children of grammar-school age and found but two who could worry through more than a few English words. The Indians realize their lack of education. They are asking for schools. They want a boarding school on the reservation. They are thoroughly alive to their great need of an education. They seem to understand—to thoroughly understand—that from now on they and their white neighbors are going to have much more to do with each other; that they have entered into the white man's industrial life and are badly handicapped because so few of them can speak the white man's language and read the white man's printed pages. An elderly Indian, through an interpreter, told me he had just returned from Phoenix, where his 18-year-old boy is attending the Indian school and he was ashamed to find his large son in a class with little boys. He added, he felt condemned because he had not sent his son to a school when he was a little boy so that now he could be in a class with boys and girls of his own age and size.

The desire of the Papagoes in the southern part of the reservation to "get ahead" was indicated by the request of some of the older Indians who asked Mr. Wells, the day-school teacher at Vamori, to open a night school for them. There is absolutely no chance for the children in the desert to attend district schools. The Government maintains five days schools on the reservation and one in Tucson, and there are six mission day schools. There should be three more Government day schools established.

But above all, there should be built, as soon as an appropriation can be secured, a reservation boarding school having a capacity for 250 children, at least. It could be located at Sells, Fresno, or San Xavier, preferably at Fresno or Sells, the water supply to be the deciding factor as to location. I attended three conferences with the Indians at San Xavier, San Miguel, and Sells, and at each one the Indians brought forward as one of their strong desires a reservation boarding school.

At San Miguel the speakers said the most important thing the Government could do to help the Indians would be to build a reservation boarding school to teach the children the principles of modern dry farming, stock raising, and the trades and industries suitable for that country and people. One of the Indians said:

We know the value of an education, but we do not want to send our children to distant schools. It is true they learn a great deal at distant schools and come back to us with a good knowledge of certain trades which might be useful elsewhere, but is of no value here. Many of them get sick and some contract tuberculosis, for they are used to our dry air, and the moist air of the distant schools gives them the consumption, and they give it to us. We want to start our children in our little day schools, and then send them to a boarding school on our reservation.

Another said:

I have grandchildren growing up and want to send them to school but not to a distant school. We would like you to go back to Washington and ask them, for us, to build a good, big boarding school for the Papago children.

The headman of the village said:

We are all in favor of a boarding school. I myself am very much in favor of one. I think it ought to be built at Indian Oasis, which is the most central place. We know we are ignorant. We want to learn. We want our children to grow up so they can stand side by side with their white friends and to do

that they must get the kind of an education the white children get. If the Government really wants to help us to help ourselves and to push ourselves along in the white man's road it ought to build a large boarding school on this reservation and there would be no trouble in filling it and keeping it filled, for we want our children to get the white children's schooling.

There were a number of speeches along the same lines.

With the exception of the irrigated farm lands of the San Xavier district, the Papago Reservation is a cattle grazing and browsing country. Live stock now is and ever will be the mainstay of the nomadic Papagoes, who constitute fully 90 per cent of the tribe. White cattlemen say that Indians only can succeed as cattle raisers in the Papago desert; that white men never have and never can learn the Indian trick of raising cattle without water. The history of cattle raising in that section bears out this statement, for a number of white men have failed in their live-stock enterprises where the Indians manage to "pull through" a series of droughts with their cattle.

Notwithstanding that live stock is the Papago's principal industry, agriculture makes more than a respectable showing considering the arid character of the country. When the controversy over the Government's expressed purpose to set aside what is now the reservation for the Indians was waging at Tucson, opponents of the reservation proposition declared the Government was giving away to Indians, who would not use them, millions of acres of the best agricultural land in the State. The objector had some basis for part of his assertion, for there are, undoubtedly, tens of thousands of acres of land which could be made to yield abundant crops if water in sufficient quantities could be placed on the land. But without water the dry soil can and does raise nothing but its native desert vegetation and shrubbery. This vegetation, however, is what keeps the cattle alive between grass seasons. The summer rains start the "six weeks' grass," which cures on the ground and is fine feed. When it is grazed off, the cattle start to browsing on cactus, mesquite, various kinds of shrubs, and weeds. When all the water gives out in the flats, the Indians and their cattle seek the mountain regions.

In the higher levels the rainfall is heavier, the grass and browsing stuff more abundant, the underground water lies nearer the surface, so that wells are shallower; but the soil is thinner and of poorer quality, the ground is broken and stony, so it is necessary for the Indians to go to the flats for their little farms. These are located with reference to natural drainage so that the surface water deposited by rains can be trapped by dikes and dams and led to the selected farm areas through ditches, if necessary. In this way the little patches of farm land are thoroughly soaked, if the rainfall is heavy enough. As soon as the soil is dry enough to work, it is prepared and planted. If the rainfall comes at the right time and in sufficient quantities a fair crop of corn, beans, squash, etc., is secured.

Every fall some winter wheat is sown and about once every three years a crop is made. Nevertheless the Papago Indians plant winter wheat with a persistent hope which is remarkable. The rainy season begins about the middle of July and rains fall through August and into September. Another wet spell begins in October, with intermittent rains up to April. The annual rainfall averages about 10 inches only. The winter wheat is started in November and, if every-

thing is favorable, harvesting begins about the middle of May. Generally, in the last of June and during July and August, corn and beans are planted. It is possible to raise two crops in one year on the same land.

Squash is one of the principal food products raised by the desert people, and pumpkin and watermelons also are important truck productions. The squash and pumpkin are cut in strips and dried. Pink beans are a staple crop, and the Santa Rosa Indians took the first prize for pink (frijole) beans at the Arizona State Fair. The little "dry" farms cultivated by the nomadic Papagoes total some 16,000 acres. Last year the rain fall was abnormally light, yet these arid-land agriculturalists, ever fighting the desert, which is always seeking its own, succeeded in forcing the desert to yield 300,000 pounds of corn, 1,800,000 pounds of beans, and about \$25,000 in value of pumpkins, squash, watermelons, and other garden truck. The irrigation farmers of the San Xavier district produced 10,000 bushels of wheat, 250 tons of barley hay (barley is raised almost entirely for hay), and about \$5,000 worth of miscellaneous garden stuff. The desert Indians had but little winter wheat because of lack of rain.

Almost a quarter of a million dollars worth of cattle were sold by the Indians last year—their own cattle, raised, branded, and handled entirely by themselves. The Government stockman himself is an Indian. It is estimated that the aggregate cattle holdings of the nomadic Papagoes are 30,000 head. It is not known just what the range capacity of the reservation is, but white cattlemen say that in good grass years the reserve ought to feed 50,000 if not 60,000 head of live stock. Had it not been for the pumping plants installed by the Indian Service in the last few years the Indians would have lost a large percentage of their stock. All the cattle we saw on the range were thin, but I was told that considering the series of dry seasons, the cattle were in pretty fair condition and would fatten quickly when the rains came.

Over 3,000 Indians are stockmen; that is, they depend solely on cattle raising as their means of livelihood. A few of them own over 1,000 head each; quite a number own over 500 head each. About 500 Indians, most of whom live in the San Xavier district, carry live stock as a "side line," depending for their living on irrigated farms, on cutting and selling firewood to Tucson people, freighting, and casual unskilled labor.

The Indian cattle is poor stock; almost all of it is scrub stuff. Little if any effort has been made to improve the stock. Until recently the Papagoes were well content with their little, thin, scrubby steers, but now they want better stock, and one of the most effective aids the Government could give the Indians would be a hundred or more Hereford bulls and a few good stallions and jacks. There are thousands of useless ponies running the range, and Supt. McCormick has started a campaign to get rid of them, for one Indian pony eats as much feed as two steers and drinks three times as much water as one.

The eagerness of the Papagoes to "get ahead," as they express it, is indicated by the two organizations which were effected when I was on the reservation. The San Xavier farmers, under the guidance of Mr. Phillipson, the agency farmer, formed a water users' associa-

tion whose purpose is to cooperate in the improvement of their lands, to restrict the use of water, and to hold monthly meetings to learn improved methods of cultivation and soil treatment from professors of the Arizona Agricultural College. The nomadic Papagoes, at the suggestion of Supt. McCormick, formed a live-stock association to work together for the upbuilding of their herds and the sale of their cattle. The Papago desert is an open range. No white men's cattle, excepting a few strays, feed on it. Papago cattle stray across the line into Mexico, and Mexican cattle drift into the reservation, but the round-ups separate the foreign from the Indian cattle, and the strays are returned to their owners. The wire for a fence, 50 miles in length, along the international boundary line, has been bought by the Government, and the Indians have volunteered to cut and put in the required 26,400 fence posts and string the barb wire. This 50-mile fence will be of great benefit to the Indians, for it will do much to keep their cattle from drifting into Mexico.

The desert yields food products which supplement the farm crops. The beans of the mesquite are dried and ground into a kind of meal. The fruit of the choilla, a cactus, is gathered when young, boiled and dried. Sirup is made from the fruit of the sahuara, the giant cactus, and by adding water and permitting fermentation, tiswin, an intoxicant, is made by some of the Papagoes living in the north. The mescal cactus is cut, roasted in the ground a number of hours, then chopped up fine and baked into a cake which, when dried, is good for food a number of months. The tuberous roots of the "saya" are dug up and eaten raw or fried like potatoes. The seed of the sahuara is good chicken feed, and most Papago families keep some poultry.

In addition to the \$143,000 worth of farm products and \$250,000 of cattle produced by the tribe, over a thousand Indians earned \$241,600 in wages working in the cotton fields, mines, on ranches and as domestics in Tucson and Ajo. About \$15,000 was the value of the baskets made and sold by 750 women, and 400 men cut and sold \$45,000 worth of firewood and 50 Indians made \$1,500 worth of hair rope, rawhide rope, and pottery. Over 2,000 Indians—heads of families and young men and women—support themselves; no able-bodied Papago shirks work or asks alms; not one receives a gratuity from the Government such as rations, clothing, or money save the little children who attend the day schools; they get a light luncheon at Government expense.

The Irrigation Division of the Indian Service, with its usual zeal and enthusiasm, is doing particularly effective work for the Papago Indians. In recent years it has installed 18 wells, with power-driven pumps, in the Papago country. Five of the wells furnish the water for the irrigation of 1,260 acres of land in the San Xavier district, every acre of which is farmed by the Indians, and 13 pumps in the desert are used entirely for stock and domestic purposes except those at Chui-chui and Ak-chin which furnish water for small irrigation projects. The San Xavier pumps total 163 horsepower and lift 7,000 gallons of water a minute. Two of these pumps get their water from the Santa Cruz River and three from wells near the river.

The San Xavier irrigation works include 25 miles of main and lateral canals, all of which were dug by the Indians and are maintained by them without expense to the Government. The pumping engines use distillate for fuel, which costs, laid down, 16½ cents a

gallon, and when all the pumps are running 24 hours a day they consume 400 gallons of distillate. The maximum pumping (24 hours a day) is done from April 1 to May 15 and again from July 15 to August 15.

The San Xavier farm lands lie along the Santa Cruz River, which is a typical Arizona stream—at times a swollen flood, racing bank-full, but generally a shallow, uncertain stream meandering between high banks. The pumps have been installed within the last seven years. Before that the Indians took water from the river by means of a brush dam and irrigated about 200 acres. But the river cut down its channel so that brush diversion dams no longer were usable and the present system was adopted.

Congress appropriates \$16,000 a year to operate the San Xavier pumps alone. This makes the irrigation of those lands an expensive proposition. It is the opinion of many that if the pumps were driven by the electric current from the Tucson central station the operating expenses would be materially reduced. There certainly would be a substantial reduction in the pay roll of the pump men, for it would cut down the required number from 10 to 2 or 3. These pump men are Indians and receive but \$1.50 a day of 12 hours. As soon as one of them becomes more or less proficient in handling a pump he quits for a better paying job. Thus there is a continual change in pump men going on and this makes for expensive operation. Unless the electric system is installed the wages of the pump men should be increased; the job should be made more attractive so as to hold a man who has been made a good pump man through the process of a practical education at Government expense.

No two San Xavier pumping plants are alike; I was told that all were secondhand machines when they were bought. Consequently each pumping plant must have its special crew, for but few Indians are far enough along the white man's road to master the intricacies of four different makes of gasoline engines. The Indian on pump No. 1, for instance, can not be shifted to pump No. 7 in a case of emergency, for he has been taught to operate pump No. 1 only. If a part of one pump breaks, a like part from another pump can not be used temporarily, because all pumping engines are different from each other.

I can not exactly figure out where economy was effected by buying for one common irrigation system five different kinds of second-hand pumping engines instead of installing a uniform pumping system, for unquestionably the result is a largely increased operating expense. The redeeming feature, however, is that the variety of equipment is giving a number of Papago Indians something more than a theoretical knowledge of the internal arrangements of several makes of pumping devices, for shutdowns for repairs occur and the Indian pump students find an exquisite pleasure in dissecting the engine to find out what is the matter with it. This gives him a practical knowledge of machinery and teaches him to use tools, and a number of Indians have become pretty good mechanics and engineers because of the five dissociated pumping plants at San Xavier.

In the desert the plants are called deep wells, because all of them go down several hundred feet. The well at Fresnal is 595 feet to water; that at Topowa, 500 feet; at Vamori, 680 feet; at Molonitas, 350 feet and the water comes out hot. In all there are 13 deep wells,

from which the power pumps lift from 9 to 75 gallons of water a minute for cattle to drink and for domestic uses. The horsepower of the deep-well pumps ranges from 4 to 50. At Ak-chin the three wells, each with a 50-horsepower pump, lift 1,100, 950, and 750 gallons of water a minute for irrigation as well as for stock. The deep-well plants are at Fresno, Topowa, Vamori, San Miguel, Molonitos, Santa Rosa, Anegam, Quajote, Komolih, Jackrabbit, Cocklebur, Chui-chui, and Ak-chin. The well at Sells was installed by the Irrigation Service, but has been turned over to the agency. To make one round of wells inspection requires a trip of 402 miles. I am of the opinion that more deep wells would open up large areas for stock raising, and would suggest that pumping plants be installed at Big Field, Tecolote, at a point halfway between San Miguel and Topowa, Iron Pipe, Burros Pond, Ventana, Black Butte, and in the Pacinimo.

Indian labor, in one capacity or another, is used at every well. There are only five white men in the service on this reservation. Outside of San Xavier and Sells every pump is in charge of an Indian resident engineer and the San Xavier pump men are Indians. Indians are used in all construction work as helpers and mechanics. In all there are 25 Indians regularly employed in the pumping service. Mr. Henry J. Brett, the assistant engineer of the irrigation division in this district, and his four assistants on the Papago Reservation, Stationary Engineers N. C. Huggins at San Xavier, Earl T. Knight, whose headquarters are at Topowa, John Pyeatt at Chui-chui, and John Sutherland at Ak-chin, do more than merely look after pumps. In addition to their official duties they are making mechanics and engineers out of Papago Indians and they are as enthusiastic and effective in that voluntary service as they are in the development of underground water supplies and installing pumping machinery. In this they have the active cooperation and encouragement of Supervising Engineer Herbert V. Clotts, whose headquarters are at Los Angeles, Calif.

The Irrigation Division "camp" at San Xavier can not be too strongly condemned. It simply is a humiliating disgrace to the service. The so-called "tent houses" which were put up several years ago for the temporary use of construction gangs have become the permanent homes of the irrigation men and their families. To force Government employees to live in such habitations is beyond explanation and excuse. The summer temperature at San Xavier goes up to 110° and above, and the weather-beaten, ragged, patched half-canvas half-board shacks, without any conveniences whatever, would be rejected by Mexican railroad workmen. The removal of the agency to Sells has given the irrigation people the use of some rooms in a house vacated by the agency employees, but they are liable to be moved from them any time, for the houses belong to the agency and are for the agency people. There should be no delay in making satisfactory arrangements which will give the men and their families of the Irrigation Division decent, comfortable living quarters.

Respectfully submitted,

MALCOLM McDOWELL,

Member, Board of Indian Commissioners.

Hon. GEORGE VAUX, Jr.,

Chairman, Board of Indian Commissioners.

APPENDIX O.

REPORT OF THE ZUÑI INDIAN RESERVATION, N. MEX., BY MALCOLM McDOWELL.

MAY 15, 1919.

SIR: The Zuñi Indians, in western New Mexico, are buying and using more modern agricultural implements, sewing machines, beds, wagons, stoves, and automobiles. More Zuñi farmers are adopting modern methods of irrigation farming, planting fruit trees, and increasing their dry-farming acreage; most of the adobe houses in Zuñi, the principal pueblo, now have windows set in their thick walls; many of the younger women have discarded the typical pueblo costume for the dress of their white sisters; and the principal trading store in the reservation carries a stock of groceries, dry goods, hardware, and general merchandise equal to the stock carried by an up-to-date store in a prosperous white community.

Such are some of the surface indications of the progress the Zuñi Indians are making which I caught during my visit to the Zuñi Reservation the first week of May, 1919. These Pueblo Indians, with a two years' supply of water for over 5,000 acres of irrigated land stored in the Blackrock Dam and with every prospect of abundant yields this year, are, seemingly, well content. Two of their principal officers sent the following message to "Waisinton": "The Ashiwis (Zuñi) are happy. All we want is larger crops and we think the coming harvests will be very good."

Supt. Robert J. Bauman met me at Gallup, April 30, and the next day took me over a very rough road to Blackrock, the agency headquarters of the Zuni Reservation, 45 miles, by road, south of Gallup. During my six days on the reservation we visited all parts of the Zuni Valley excepting the Nutrias district in the extreme north. Everywhere we found the Zuni working in their fields or with their flocks of sheep and goats. Nowhere were there any idle able-bodied men.

The Indians live in four pueblos; Zuni, Ojo Caliente, Pescado, which is in two villages, and Nutrias. Zuni is the largest pueblo, and most of the Indians come there from the outlying villages for the winter. Blackrock, the agency seat, is 4 miles north of Zuni, and is the site of the reservation boarding school and the dam and storage reservoir where a supply of water is maintained for irrigation purposes.

The Zuni Indians are making good progress in many ways, and are beginning to break away from some of the tribal traditions and customs which heretofore have made them a somewhat difficult people to help take up progressive ideas and modern agricultural practices. The time seems to be opportune for making stronger efforts to help them to help themselves forward on the road to civilization, and this effort can be made most effective by increasing school facilities and encouraging the doctor and field matron by bettering their living conditions. Therefore I recommend:

(1) A new schoolhouse with sufficient classrooms and an assembly hall at Blackrock. The old dormitory building, which is occupied by 73 boys and 42 girls, contains not only the dining room and kitchen but the classrooms and reading room. There are three small classrooms and the dining room, which is used for the assembly hall, is

too small for all the children and employees. Several of the employees have their quarters in this building.

(2) A dormitory for girls.

(3) Cottages for the superintendent, carpenter, engineer, and blacksmith.

(4) The building of the new day school at Zuni, to accommodate 250 children, for which plans have been drawn.

(5) A better house for the agency physician, who now lives in a little adobe house entirely inadequate for the home of so important a person as a physician responsible for the health of so large a community.

(6) A home for the field matron, which should be large enough to serve as a community center for the Zuni.

(7) The early exchange of railroad lands within the recent extension of the Zuni Reservation. This affects about five townships.

Prior to 1902 the Zuni Indians were under the supervision of the agent of the Pueblo Indians in Albuquerque. A day-school teacher and field matron were detailed to Zuni, but the Zuni Indians for years received little attention from the Government. Their country, however, was the favorite hunting ground of the ethnologist and archaeologist for the ruins of ancient pueblos and cliffs dwellings abound in the Zuni Valley and the Zuni were steadfast in their adherence to their ancient religion, superstitions, dances, belief in witches, signs and omens, and in their refusal to change even a detail of their old-time form of government and clan organizations.

In 1902 the Zuni Reservation was instituted and a bonded superintendent sent to the Indians. That was but 17 years ago and the superintendent's wagon was the only vehicle with spoked wheels in the reservation. The Indians used the hoe and the plow made from the forked limb of a tree. Their only wheeled vehicle was a cart with clumsy wooden disks hewed from planks. A few sewing machines which the first field matron had induced some of the Indians to buy, a few iron plows and a few harrows represented the Zuni advance in the use of the white man's farm and household appliances. Men and women accused of witchcraft were tried, condemned, and executed by order of the Zuni government, and this happened only 17 years ago.

Only three superintendents have been in charge at Zuni during the 17 years of the reservation's existence and all proved to be good, conscientious, efficient superintendents. This is their record, and the result of their administrations is apparent to anyone who rides through the reserve and sees the Indians using modern plows, cultivators, harrows, seeders, disk plows and harrows, wagons, and automobiles. Supt. Bauman told me that in the 8 years of his superintendency the number of agricultural implements alone, bought by the Indians, had increased 10 times over the number on the reservation when he was inducted into his office.

In matters of the Zuni religion, which embraces priestcraft, dances, and ceremonials and directly influences almost every detail of individual, family, and community life, these interesting Indians are reactionaries. They still are pagans notwithstanding the years of missionary efforts of the Catholic, Presbyterian, and Christian Reformed Churches. The rain priests continue to nominate and domi-

nate the tribal civic officials; they are the real governors so far as tribal affairs are concerned.

But the Blackrock Dam, with its square mile of stored water back of it, sufficient for the irrigation of 5,000 acres of Zuni farm land for two years, is exerting a progressive influence which the Indians themselves are beginning to recognize. One of the most significant indications of the economic and social changes which this reservoir of water is quietly effecting is the movement of families away from the pueblo of Zuni to permanent homes nearer the irrigated farm lands.

This radical departure from living conditions which have remained unchanged for centuries—excepting those occasions when the Spanish and Indian enemy invaders forced the Zuni to flee to the mountains—is clearly due to the confidence which the Zuni repose in the dam and storage reservoir as a certain water supply. They, at last, seem to be coming to the realization that prayer dances, incantations, and ceremonials for rain no longer are absolutely necessary to bring the precious water to their plowed fields. That, in time, this changing state of mind will weaken the influence of the rain priests and bring about other changes in the line of progress is almost a certainty.

The Zuni are a conservative people. They can be led much faster than they can be driven. They are slow to take up new things, to attempt novel experiments, to get out of ruts. Time, patience, and tact are required to lead them from their time-honored ways and customs. Fortunately there are a few exceptional men who, naturally, are progressive and have more courage than their fellow tribesmen. Supt. Bauman induced them to adopt some of the modern methods of irrigation farming and their success developed imitators who also were successful.

For instance, the Zuni used to throw manure into arroyos and washes to aid in checking erosion. Supt. Bauman, for some time, could get no Indian to spread the manure over his field. At length he persuaded a few to do so. The almost immediate evidence of the fertilizing value of manure was so convincing that other Zuni spread manure over their fields and now the practice is common. The agency farm had been manured every year, but the Indians seem to think they could not do what the white men did; it required experimentation by Zuni farmers to convince the Indians the white man's use of manure as a fertilizer instead of a water check was the better.

The Zuni are an agricultural and pastoral people. Over 600 farm for themselves and about 500 raise live stock as a livelihood, while some 700 own more or less cattle and sheep. The farmers last year raised 1,200,000 pounds of wheat, 100,000 pounds of oats, 1,000,000 pounds of corn, 250,000 pounds of beans, 80 tons of alfalfa, and 800,000 pounds of miscellaneous product such as squash, pumpkins, melons, and garden truck. The live-stock census showed the Indians owned 41,000 sheep, 6,000 goats, 700 cows and heifers, 150 steers, 500 burros, 400 horses (most of them Indian ponies), 450 mares, 50 bulls, 20 pony and 12 large stallions, 150 hogs and pigs, and a large number of chickens. There is no tribal herd, no lands are leased to outsiders, no rations or gratuitous funds are distributed, for all the Indians are self-supporting and every able-bodied man and

woman works. Instead of leasing their reservation grazing land to outsiders, the Zuni go outside their reservation to rent land for the grazing of their own cattle and sheep. No Zuni has an allotment.

Last year the Zuni farmers put 2,000 acres in wheat, 150 in oats, 1,800 in corn, 500 in beans, 60 in alfalfa, and about 1,500 in miscellaneous garden truck. They use about 250,000 acres for grazing within the reservation and rent several townships outside.

The 1918 census taken by the superintendent reports a total population of 1,815, divided into 730 families, all living in houses. Of the 546 children eligible for school 122 were students at the Zuni Boarding School at Blackrock, 149 at the day school at Zuni, and 27 at the mission school conducted in the pueblo of Zuni by the Christian Reform missionary. A total of 298 children attended school on the reservation and 20 children were in attendance at the nonreservation boarding school, leaving 228 children who did not attend school. The total capacity of all schools on the reservation is 228.

The Indian Office has adopted plans for a new day school in the pueblo of Zuni to accommodate 250, which would take care of 100 of the children who are not in school. The plans which the Indian Office has in mind for improving and enlarging the day school at Zuni provide for buildings, playgrounds, gardens, bathing facilities, and other improvements which should make the school a most effective force in hastening the progress of the Indians. If the Indian Office would build a home for the field matron, with sufficient room for a little community center where the field matron could get in touch with the women of the tribe, I feel certain her sphere of influence would be greatly increased. She now lives in a small, rented building.

The doctor's house is not at all suitable for a white man's home. The Government physician at Zuni is in competition with a cult of medicine men who have back of them the religion, superstition, and tradition of centuries. He has a most difficult position. It certainly is not too much to ask that he be decently housed and given adequate dispensary facilities.

The reservation boarding school at Blackrock is an old building which is used for a dormitory, dining room, kitchen, classroom, reading room, assembly hall, and quarters for several agency employees. In bad weather there is no place for the children except the crowded rooms in this building. The situation can be relieved if a school building with an assembly hall and reading rooms would be constructed, and by taking the classrooms out of the dormitory the school capacity would be increased. A girls' dormitory also should be built. It is much needed. The superintendent is living in an old cottage, one of the first buildings that were erected at Blackrock. A number of married employees are in the little mess building. There is ample room at Blackrock for cottages for the superintendent, carpenter, engineer, and blacksmith. The flour mill, with a daily capacity of 25 barrels of flour, has just been completed, and there is no place for the miller and his wife to live. Cottages for employees are a real necessity.

Some of the women of the tribe are looking forward with considerable impatience for the new flour mill to begin operation. A large part of their time is taken up grinding wheat and corn into flour and meal for family use in the Zuni mill. This consists of two stones, one a slab which has been made concave by dint of much rubbing, on

which the corn or wheat is spread. The other is a hand stone of the size and shape of a rolling-pin, with which the women crush the corn and grain into flour or meal. There seems little doubt that the women will have their grain ground in the Government mill, and thus another of the picturesque Zuni institutions will give way to modern methods. This may be sad news to scientists, artists, and writers with whom the Zuni have been favorite subjects and topics, but it marks a decided advance toward civilization of these backward Indians.

The Blackrock storage reservoir, which has become one of the most important factors in the civilization of these Indians, has back of it 606 square miles of watershed. This is practically the Zuni Valley with its branches, of which the Nutrias Valley and Horsehead Canyon are the principal. Most of the reservoir supply comes from the Zuni, Nutrias, and Horsehead Valleys. The dam which was built by the Irrigation Division of the Indian Service is 870 feet long with a spillway 200 feet wide. The dam is of rugged construction and a fine piece of work, built of stone from a quarry near by. Its exposed portion stands 70 feet high, but it is 110 feet from the crest to the bottom of core wall. The reservoir covers 620 acres, and it had a supply of water, when I was there, sufficient to irrigate all of the land in the project for two years. The average elevation of the irrigable area is 6,300 feet and of the watershed 7,500 feet. The average annual rainfall on the watershed is 12 inches and on the irrigable area 8 inches, and the temperature ranges from 24° below zero to 100° above.

The total area of land under the Blackrock project is 7,120 acres, and 10 miles of main ditches and 30 of lateral ditches now irrigate 5,500 acres. This is one of the most successful of the irrigation projects in the Indian Service, and a comparatively small expenditure of money will put several thousand more acres of land under irrigation. The reservoir is menaced by silt deposited by the flood water, but the dam can be raised several feet, so there is little cause for apprehension that silt will fill up the reservoir for a number of years. The Indians are successful dry farmers and raise considerable corn outside of the irrigated area. The women have gardens on the bank of the Zuni River, in the pueblo of Zuni, which are miniatures of their husbands' irrigated farms, and an astonishingly large amount of garden truck is raised in these little patches.

In many ways the Zuni Indians have changed but little since the Spaniards under Francisco Coronado, in 1540, entered that country and forced the Indians to take refuge on Taaiyalone (Corn Mountain), which continues to be the center of old Zuni ceremonial and religious rites. This picturesque mountain stands near Blackrock. The land is divided among the Zuni by mutual agreement and communal consent. A family "owns" by right of selection, occupancy, and use, and this right passes within the tribe as if the lands were owned in fee simple. Houses have the same character of ownership. If the irrigated lands there are allotted, this system of holding property will complicate matters unless the allotment is made by some one who is quite familiar with the Zuni land matters. The Zuni government is hierarchical; four religious groups dominate the tribal government. The principal group is the Ashiwani, the rain priests, who nominate the governor and his four assistants and the lieutenant gov-

ernor and his four assistants. The Ashiwani claim they have no part in civic affairs, but their influence is so strong they actually are the governors. Naturally the rain priests are reactionary and the Zuni will advance on the road to civilization more rapidly when the power of the rain priests weaken. The cane which President Lincoln gave to the governor of each of the pueblos in New Mexico is the staff of office of the governor of Zuni.

The greater part of the marriages within the tribe is tribal. Of 49 marriages last year 46 were tribal and 10 of the 12 divorces or separations were tribal. I was told that as far as morality is concerned the Zuni were moral according to their own standards. The tribe is somewhat off the beaten track of transcontinental travel and is not visited by many tourists, nor do the Zuni Indians come in contact with many white men. Their nearest neighbors are Mormons who live in the little village of Ramah, 25 miles east of Blackrock, just outside of the reservation.

There are two Christian Reformed Church missionaries at Zuni, and they conduct a very good day school and a Young Men's Christian Association room. There is but one church building, the Christian Reformed at Zuni, on the reservation. A Catholic missionary from Gallup visits these Indians occasionally. Years ago the Catholic fathers maintained a mission in the Zuni country; they were followed by the Presbyterians and then the Christian Reformed Church. I was told that the net result of all of these missionary efforts was two church members at present.

The tribe is divided into about 15 clans and a number of fraternities. Each clan and fraternity has dances, and in the late fall of the year a week is given over to the annual festival called the Shalako, which from all accounts is a much more pretentious and important celebration than the Hopi snake dance. For a time there seemed to be less dancing, but within recent years the dancing has increased, and I was told this was because some of the returned students became quite active in the clans and fraternities and revived some of the dances. Supt. Bauman told me he did not think the dances interfered with the work of the Indians and that most of them attracted but little attention. The Shalako dance, however, brings to the pueblo a large number of spectators from outside. It is interesting to know that no Mexicans are permitted in the pueblo the first day of this dance.

The houses of these Indians are typical pueblo homes, built of adobe. Some of the houses have as many as eight rooms; most of them have windows. Sewing machines and beds are seen in many houses. Some of the homes of the richer Indians are rather expensively furnished, with the floors covered with Navajo and fur rugs. The women make pottery from the black clay which they get on Corn Mountain and on the mesas near Ojo Caliente and Pescado. They weave some blankets and dresses, but most of the rugs are Navajo and most of the short narrow skirts worn by Zuni women are made by the Hopi Indians.

The Zuni Indians seem to be in good health. There is some tuberculosis and trachoma, but the percentage of the Indians so afflicted is small. These Indians have a well-fed look. They eat beef, mutton, pork, chicken, corn, wheat, beans, squash, watermelon, cantaloupe, and other garden truck. The old mission fathers years ago

planted peach trees on the slopes of Corn Mountain and when the peaches are ripe the whole tribe moves to the mountain to gather and dry the peaches, for the Zuni are strong on conservation of food products. They are adepts in drying squash, beans, and other products, and every family keeps a year's supply of corn on hand.

In 1917 approximately 73,000 acres were added to the Zuni Reservation by Executive order, increasing its area to 288,000 acres. In this extension are a number of sections of railroad land. Negotiations for the exchange of these lands are pending, but the war checked the negotiations and it is highly desirable, now that the war is over, that the exchange of these railroad lands should be carried forward as rapidly as possible.

Respectfully submitted,

MALCOLM McDOWELL,
Member, Board of Indian Commissioners.

HON. GEORGE VAUX, JR.,
Chairman, Board of Indian Commissioners.

APPENDIX P.

REPORT ON THE PUEBLO INDIANS OF NEW MEXICO, BY GEORGE VAUX, JR.

BRYN MAWR, PA.
June 28, 1919.

THE BOARD OF INDIAN COMMISSIONERS.

GENTLEMEN: In accordance with your request, made at the annual meeting of the board held in January last, that I should continue my investigations among the Pueblo Indians in New Mexico, I have the honor to report that I devoted nearly five weeks to this subject in April and May last, covering the period both before and after the sessions of the board held in New Mexico on April 16-18. My report, however, covers nothing with regard to Zuni, as I was not there, but is devoted entirely to the Pueblos under the jurisdiction of the superintendent at Albuquerque, N. Mex. Most happily Commissioner Ketcham was able so to arrange his plans as to accompany me in almost all the visiting that I did after the meeting of the board. I believe that the recommendations of this report are fully concurred in by him. At least at some of the points visited, where problems were very serious, there was great advantage in having two commissioners present.

In all there are 17 of these pueblos. Each of these comprises one recognized village, and, in addition, there are 2 dependent villages at Acoma, 6 at Laguna, and 1 at Isleta, and 1 at Santa Ana. I was at all of the main pueblos except Picuris and at all of the other villages except four. In addition I was at Pajuaque, which has been abandoned comparatively recently, most of the Indians having gone to live at Nambe.

At each of the pueblos that I visited, except San Felipe, there were conferences held to which the more important Indians were invited. At all of these the governors were present as well as the other officers and principales of the pueblos, and in addition a very considerable number of the leading men. We had full discussions of their needs,

and they made to us numerous representations concerning them. The prospects for the future were also discussed. In this report and the recommendations which I shall make, the results of these interviews are embodied. In all of these conferences we were most cordially received except at Santo Domingo, where there is a strong reactionary spirit and the Indians are absolutely unwilling to cooperate with the efforts of the Government to improve their conditions.

The pueblos are very much scattered. The most northern is Taos, which is about 150 miles in an air line north of Albuquerque, while Acoma, the one farthest to the southwest, is about 75 miles in that direction. Geographically the pueblos may be arranged according to their location in four main groups:

Northern:

Taos.
Picuris.

Central:

Tesuque.
Nambe.
Pajuaque (discontinued).
San Ildefonso.
Santa Clara.
San Juan.

South Central:

Jemez.
Sia.
Santa Ana.
Cochiti.
Santo Domingo.
San Felipe.
Sandia.

Southern:

Isleta.
Laguna.
Acoma.

The pueblos vary very much in size as well as in the advancement of the people and their desire to be progressive. They speak several different languages, although they come near to having a common tongue in the Spanish. About one-half of these Indians speak no English, although this condition is improving, and I thought I saw indications of advancement in the two years that had elapsed since I last visited some of them.

As a matter of administration, probably the outstanding feature which was the most noticeable was the absolute impracticability of a superintendent located at Albuquerque having charge of all of these different villages giving proper attention to them. It is impossible for any man, no matter how competent he is, to do justice to such a task—for one reason if for no other, that the distances to be covered are so great that no one can possibly visit the various localities with any degree of regularity. For example, to reach Taos and return is a three-day trip from Albuquerque, and an additional day is required if any time is to be allotted to the Indians there; while a visit to Picuris, which is adjacent to Taos, would require two days more. Taos is some 30 miles from the nearest point on the railroad, over not very good roads, and Picuris is much farther. Its inaccessibility is

shown by the fact that when I was at Taos the last week in April I could get no conveyance whatever to take me to Picuris because the roads were considered impassable owing to heavy rains and snow in the mountains which would have to be crossed in order to reach it. The average elevation of the Picuris grant is about 7,000 feet above sea level. Again, to reach Jemez and Sia, which are but 7 miles apart, requires a two-day trip by motor from Albuquerque. Nambe would require a day trip by motor from either Santa Fe or Espanola.

After considering carefully these points, I would most strongly urge that this jurisdiction be divided and a new superintendency be created with headquarters at Espanola, to which should be attached the seven pueblos which I have classified above as the northern and central groups. San Juan, Santa Clara, and San Ildefonso are all within a very few miles of this point, while Nambe and Tesuque can easily be reached from there by motor and the railroad which runs from Santa Fe north continues through Espanola on to Taos Junction, the railroad point for both Taos and Picuris. A superintendent at this point would be conveniently located so as to be reached by all of these Indians, and it would be possible for him to give the personal supervision to them which they require and which is entirely out of the question when the superintendency headquarters are so very far removed as Albuquerque. To my mind Espanola is a more available point to locate such a superintendency than Santa Fe.

I have no sympathy with the idea that the duties of a superintendent are principally to sit in his office and make himself familiar with multitudinous and ever-changing regulations, but rather that he should be so situated that he can come in daily touch with the Indians who are under him, become personally acquainted with them and their problems, in order that he may advise them helpfully at every turn of their careers. This does not mean to baby them or belittle their own efforts, but it does mean that they shall have the advice and assistance which the Government has promised them and which in too many instances it is failing to give. In most cases this failure does not arise from lack of capacity or willingness on the part of superintendents, but because their attention is required to be given so much to office affairs that the human side of the question must necessarily be entirely subordinated. No administration of Indian affairs can be a success which views the problems from the end of the office organization in Washington. That organization is essential, but is merely a means to an end, and Washington must view the problems through the eye-end of a telescope and not through the big end, or else Indian administration will be largely a failure. There are probably as many or more complex problems arising among the Pueblos as among any other of the Indians that we have. This is because of the great diversity that there is among them and their unique legal position arising from the variety of ways in which their lands are held—Spanish grants, purchases by the Indians themselves, Executive order reservations, and perhaps some others—bringing up a diversity of questions which require the utmost skill and patience in their adjustment. As before stated, it is impossible for any one man to do what ought to be done in the wide territory that is covered by all these different pueblos.

Much that might be done to mitigate the present situation has not been brought about. A comparatively small outlay of money would make it possible to very much improve some of the existing shortcomings. One of them would be telephone communication by which all of the pueblos could be reached. This would be a matter of great convenience to everyone concerned and is really essential. For example, take a matter of health. At the present time the physician who is employed by the Government for all of the pueblos classed in the central group has his office at Espanola. The only way in which he can be secured for an emergency call is to send a messenger to his office to fetch him, and as none of these Indians have motors it means for someone to go by horse anywhere from 7 to 30 miles to get the physician. The situation needs but to be stated for anyone to appreciate its importance.

Another very great improvement could be made by increasing the efficiency of the automobiles belonging to the service. I saw scarcely any Government motors in New Mexico that were suitable for the work which is demanded of them as they are lacking in the power that is requisite successfully to negotiate the hills, sandy roads and fords of the rivers which have to be crossed not infrequently at flood stage.

LEGAL STATUS.

Probably the most serious question affecting the Pueblos at the present time is that respecting their legal status. When New Mexico was admitted as a State, the enabling act provided that Congress by appropriate legislation might give the United States courts exclusive jurisdiction over all matters relating to the Pueblos. No such legislation has ever been enacted, and there has been a diversity of view and practice as to whether or not the State courts have any jurisdiction where the Pueblos are parties, either in a quasi corporate capacity or as individuals. There can be no doubt but that the best interests of the Indians demand that the United States courts should have exclusive jurisdiction over them and their affairs. All experience has proven the improbability of their securing justice and fair play at the hands of State tribunals where their interests may be opposed to those of white citizens whose influence in the body politic is naturally vastly greater than that of the Indians. The same underlying principle is seen wherever there is contact between a dominant race and one not so far advanced. It is merely what is generally called human nature, and like many other similar traits must be accepted as a fact and dealt with accordingly. No one thing could do more at the present time for the Indians of the country as a whole and for the Pueblos in particular than to have their status definitely and finally determined, and if, as in the case of the Pueblos in New Mexico, a simple law were to be passed by Congress giving the United States courts jurisdiction, much confusion would immediately be avoided, the chances of justice being done to the Indian would be infinitely increased, and at the same time all proper rights of their white neighbors would also be fully protected.

At the present time there is pending and undecided in the United States court in New Mexico a controversy which will go far toward deciding the jurisdiction of Federal tribunals under existing law. It relates to very complicated questions arising out of the pueblo prac-

tice and procedure from prehistoric times as modified by progress toward civilization. The case to which I allude is that involving the custody of the title deeds and official canes of the governor of the pueblo of San Juan. The deeds comprise the Spanish and Mexican grants, etc., while the canes, which are really the insignia of the office of the governor, were presented to the pueblo, one by the Spaniards, and the other by President Lincoln. Their custody is passed on from governor to governor as that official changes.

The regular officers of the pueblo are elected every year, usually not far from the 1st of January. I say elected, for that is apparently nominally the method of selecting the governors and his associates. As a matter of fact the process is much more complicated and far less democratic. Originally in each of the pueblos there were certain officers known as caciques. Of these there are usually two, the ascendancy of one being during the winter and that of the other during the summer. These men are the personification of all that is pagan, conservative, and reactionary in the life of the pueblo. They are different from the so-called medicine men, but apparently have much of the same occult and degrading influence of those officials. Just prior to the time of the election, these two caciques meet and agree upon who is to be the governor, and their selection is then chosen by the people. It will thus be seen that the caciques are of very great power and influence in the pueblo, as they practically hold in their hands the final authority with regard to all appointments.

Since 1913, in the pueblo of San Juan, there have been rival claimants to the position of governor and other offices. It is exceedingly difficult to discover the exact cause of the split and the reasons why it has lasted so long. The trouble originated about 1913, at the time when it was contended that the United States courts had no further jurisdiction over the Pueblos. This gave the opportunity for persons who had designs upon the real estate and other property of this pueblo to use their influence among certain of the Indians to cause them to be disaffected, and, with the assistance of the various means that are employed by such people, such as the surreptitious introduction of liquor and other similar proceedings, to create a situation of thorough demoralization which must cause much uneasiness to all true friends of the Indians. There are doubtless influences working at the present time at San Juan, highly selfish in their character, the intent of which is continually to widen the breach between the two factions and to make it impossible to reconcile their differences. Some of these men are land speculators, while others are not openly engaged in that line of business.

Roughly speaking, about one-third of the Indians are those who acknowledge the original form of government, and are docile and friendly to the administration of the Indian Bureau, and who stated openly in the protracted meetings which we held that it was their desire to conform to all of the wishes of the United States authorities. The other party comprises about two-thirds of the Indians, including those who are inclined to defy all authority, and who are desirous of so managing the affairs of the Pueblo as to speedily squander what little property it has left. I was informed on what seemed to be indubitable authority, of two or more deeds for Pueblo lands that had been prepared for signature by the San Juan officials in the event of

this latter party being successful, and which were in the hands of the acknowledged agent of speculators awaiting a determination of the controversy now pending, as to which of the rival governors is properly entitled to that office. These deeds were to cover lawyers' fees, etc., and should this suit be determined adversely to the contention of the Government officials, the conveyances would be made.

The present status of the dispute is that the majority party had brought proceedings in the State courts to secure process to place them in power. This has been contested by the minority party who placed the deeds and canes above mentioned in the custody of Supt. Lonergan for safe-keeping. The State court ordered him to produce these documents to it, which he declined to do under advice of counsel, and was committed for contempt of court. The United States court immediately intervened and the question of jurisdiction is now pending before the latter. It is most sincerely to be hoped that this decision will be in favor of the contention of the United States Government, and that the claims of the State authorities will be denied.

It can readily be seen that so vital a controversy among the Indians themselves must seriously interfere with all matters of administration in the pueblo. When Supt. Lonergan inherited this fight from his predecessor he had upon his hands many very difficult problems which it involved. After very careful investigation, and hearing much from a great many people, Indians and others, I am convinced that Supt. Lonergan's action has been for the very best interests of the Indians and is calculated to be helpful to them, and that he should be supported in it in every way, although his course has naturally resulted in much antagonism to him, not only by the party among the Indians whom he has felt that he must oppose but also by white men, some of them living in the pueblo, whose schemes were not advanced by this position of the superintendent. The Indians complain seriously that their superintendent has been guilty of favoritism in the distribution of seeds, implements, etc. In the meeting where they were questioned on this subject the majority party denied that they had received from the Government any articles of the sorts above named, although when individuals were asked the definite question they admitted that the broad statement was not correct. Afterwards from the office at Albuquerque I secured statistics made up from the receipts on file there from the Indians, and found that 11 of this party had received such articles during the past three years as compared with 19 of the other party. For this seeming discrimination there were two reasons. In the first place, the majority party, being in opposition to the policy of the Government, largely declined to ask for or receive any of the articles which were being distributed from the office, whereas their opponents, not being contumacious, were willing to accept the assistance which the Government was offering to all alike. In the second place, the governor who was acknowledged by the office belonged to the other party. Many articles were issued to him in his official capacity, and such being the case the majority declined to have anything to do with them. It seemed to me that the charges of favoritism were very effectively answered and disproved. It is impossible to force assistance on those who absolutely decline to receive it.

The results of this long drawn-out controversy can be seen in the village itself, where outsiders are getting more and more foothold,

taking advantage of the lack of harmony among the Indians, and where the work of the pueblo is suffering seriously because of the clash of authority between the rival governors and their associates. Irrigation ditches are not kept up, the usual sanitary measures in the village are not being looked after, and generally conditions are most unsanitary. Petty offenses of all sorts go unpunished and the only persons to gain anything by it are those who are willing to see the Indians destroyed.

My belief is strong that a part at least of all of this trouble might have been avoided had the organization of the superintendency been such that it was geographically possible for these Indians to be under the very frequent eye of their superintendent. San Juan is less than 10 miles from Espanola, and were there a superintendent of tact and firmness located there, having charge of the Pueblos in this part of New Mexico, I believe that with the frequent personal contact that would have been possible a very large part of this difficulty could have been averted. The one train a day from Santa Fe to Chamita, the railroad town for San Juan, leaves Santa Fe about the middle of the morning, reaching Chamita in the early afternoon, while the returning train the next day under present railroad schedules does not connect with the train out of Santa Fe for Albuquerque, so that to attend to business at San Juan which might require but an hour would involve nearly three days of time from Albuquerque. The impossibility of this situation from the standpoint of effective administration is evident.

I have emphasized the conditions at San Juan because I believe that there is likelihood that they may be repeated in several other pueblos. Unfortunate as these conditions are, they would appear to be somewhat akin to growing pains, very disagreeable while they last, fraught with many dangers, and yet they are symptoms of progress and if rightly understood and properly handled will lead to no serious permanent disadvantage. With the increase of education, more and more the powers of the caciques will wane, and educated men with ideals for their people will be the dominant influence in the pueblos. That this is no dream is shown by the situation at Laguna, admittedly the most advanced and best governed of any of these Indian villages. Here the men of influence are those who have received an education, who know something of the white man's civilization and who have aspirations that their people may profit by all that is best that the white man has to offer. Several of these men were educated at Carlisle, and if that great institution had done nothing else than produce them, its existence would be justified.

Be it noted also that at Laguna there is no cacique to interfere with the progress of the people. In several of the other pueblos also, either there is no cacique at the moment or else there seems no line of succession for that office, and it can not be long before the same sort of influences that have prevailed at Laguna will make themselves felt in these other localities. In some of the other pueblos also there are men who have been educated and who have ideals, who are only waiting the right time to turn their backs entirely upon the pagan past and embrace the advantages, which during their school years, they have seen might be the possession of their people. These men need encouragement. They need alvica. Perhaps sometimes they might need restraining. Their superin-

tendent is the one man above all others who should be so situated as to be able to afford them the disinterested assistance which they need.

Closely connected with this problem of legal status is that involving the land holdings of all the pueblos. It is a sorrowful problem which has to be met everywhere except, possibly, at Taos, that through encroachments by whites and Mexicans their original pueblo grants, made to them by the Spanish Crown and further secured by the Treaty of Guadalupe-Hidalgo, have been so reduced that in many places the land that is left is barely sufficient to afford them a living. This robbery has gone on ever since the American ascendancy and is going on to-day. There was not a pueblo that I visited where emphasis was not laid by the people upon the fact that they are day by day becoming poorer through being robbed of their land and of the water which alone can make their land available for agricultural purposes. With but one exception, it would seem as though the amount of land now under cultivation by the pueblos respectively has materially decreased during the past few years, and this, in face of the fact of the encouragement given to the Indians by the Indian Office and the introduction of much improved machinery and farming methods.

I well remember my first visit to the Pueblos, now over 30 years ago, when their plows were merely sharp-pointed sticks dragged by oxen. Upon the present visit I could not hear of one of these old implements, although I was anxious to secure such as a relic. Yet in face of advancement of this material sort, the results of farming seem to be decreasing, as above stated, because of the loss of land and of the water to put upon it. This is no imaginary situation. At Laguna, this year, there have been brought in by railroad 25 carloads of hay, 30,000 pounds of corn, and 30,000 pounds of oats to meet the deficiency in crops—this at a village where there are 1,800 people ready and willing to work, and who could easily double their present cultivated area of about 700 or 800 acres if they had the land and the water to put on it. And controversies now pending in the courts would, if successful, deprive them of a material portion of what they are now cultivating.

Some control of the squatters who are stealing the land and water of these Indians is absolutely essential if they are not to become paupers. Their livelihood comes from agriculture and sheep and stock raising, and every day they are suffering at the hands of their neighbors, who seem not to allow a single 24 hours to pass by without pressing the Indians back somewhere a little farther. To remedy this situation among the Pueblos, immediate, continuous, and disinterested legal action is essential. It is a satisfaction to know that after nearly 10 months of inactivity and because there was no one appointed to the position of attorney for the Pueblos, in January of this year Mr. Richard H. Hanna, of Albuquerque, was appointed to that position. Judge Hanna is a man of parts, who has been on the supreme court bench in the State of New Mexico and was for a time chief justice of that court.

I had the privilege of discussing with him many of the legal problems involved in these trespass cases, and I feel an assured hope that brighter days are dawning for the Pueblos, and with the legal action which Judge Hanna is about instituting, many of the wrongs which have been done to them run a good chance of being righted. As a

necessary preliminary to the bringing of the hundreds of suits involved, for several years past surveys of the various pueblos have been made, showing not only the lines of the grants, but also the location of all the squatters who have trespassed upon them. This work is now practically, if not entirely, completed, and the surveys will form the bases of the necessary legal proceedings. So much time has elapsed that it is hopeless, in many instances, that justice may now be done to the Indians and their stolen lands recovered. There are, however, hosts of cases where adverse titles have not ripened and where it will be possible to recover for the Indians lands that are essential to their very life. I can not too strongly urge that Judge Hanna may be afforded every support possible which may look toward the speedy prosecution of these cases and their final adjudication.

One very serious practical situation in connection with these land questions might very easily be improved if the recommendations which I emphasized two years ago had been followed out. I refer to the importance of fencing the whole of the pueblo grants and reservations. In almost every pueblo this matter was referred to in our conferences, and all of the Indians appeared to be eager to cut the posts and erect the fences if the Government will provide them the necessary wire for the purpose. I can not urge too strongly the importance of the Indian Bureau taking this matter up with activity and, if there are no funds available for the purpose, endeavoring to secure a congressional appropriation. The total amount of wire required for all the pueblos would be about 9,000 rolls. This will involve the outlay of a good deal of money, but its great importance to the Indians will fully justify it. At the present time the lines of the various grants, and reservations are not marked in such a way as to be plainly visible, and the result is that a squatter can very properly state that he was not aware that he was encroaching on Indian lands, as there was nothing so to indicate. I believe that this is a most important step in the protection of the Pueblos' land rights and is a necessary precaution in connection with the bringing of the suits against squatters.

THE SCHOOL SITUATION.

Theoretically the Pueblos are well supplied with schools. In addition to the two excellent boarding schools, one at Santa Fe and the other at Albuquerque, each of which is under a separate superintendent, there are 19 day schools which are under the Pueblo Day Schools Agency, the headquarters of which is located at Albuquerque.

I visited both of the boarding schools and found their general condition admirable, but did not go into so detailed an investigation as to make it profitable to indulge in separate reports respecting them. The new land purchased for the Albuquerque School is of very great advantage to it, although Supt. Perry is of opinion that still greater facilities for farming are desirable. In this I agree with him and feel that if an additional plot of land which he desires to buy could be secured at a reasonable price, it would be a very great advantage to the school to purchase it.

At Santa Fe some additional buildings are very much needed. Supt. De Huff has several plans in mind which will supply a suitable hospital and some other badly needed facilities.

Besides these Government schools, there are in addition the boarding schools at Santa Fe and at Bernalillo under the care of Catholic sisters, both of which I visited and found them in creditable condition and doing excellent work.

I was most interested, however, in the day schools run by the Government or under its immediate authority in the various pueblos themselves. As above stated, there are 19 of these schools with a total enrollment of 834 children. A number of the schools are quite insufficient for the requirements and steps should be taken to improve the conditions at once. Four of the schools are in rented buildings which are not at all suitable and there is also crying need for decent employees' quarters at several of the villages. A number of the field matrons are housed in ramshackle buildings which are a disgrace to the Indian Bureau. The equipment in these houses is sadly lacking also. The only wonder is that any self-respecting woman would endure such surroundings as are required. I believe that if a responsible official from Washington were to take the trouble to visit some of the pueblos where I was, he, too, would be incensed at these conditions. It is very easy to see Santa Fe and Albuquerque, and perhaps spend a few hours in motoring between these two points, stopping en route for a hasty visit at one or more of the pueblos near to which the road goes. Such an inspection is nearly useless, and gives but little idea of the conditions that exist, under which employees of the United States Government are expected to give unstinted service to our Indian wards. It is not to be wondered that unrest and dissatisfaction are rife, and that many of the best people are leaving the service. They are devoting their lives to the work, often for ridiculously small pay. They should and must have decent treatment at the hands of their employer, the Government of the United States.

Possibly the most important school situation is that at Santa Ana. Conditions here are peculiar. The pueblo is situated in a very inaccessible location on the left bank of the Jemez River, which is very difficult to cross at that point, so that to reach it from Albuquerque requires an all-day trip by motor and wagon. Part of the distance there is no road at all but a mere winding, shifting track largely over sand dunes. The whole region is more or less inundated with drifting sand. According to local tradition, many years ago the pueblo was located on the right side of the river, but the sand became so bad that site was abandoned and the present one occupied. This statement, however, does not appear to be capable of being supported historically, the change in location having resulted from the conditions following the Pueblo Rebellion of 1680. In any event, the present location is a most unfortunate one. When I was there the village was suffering from two serious causes of damage. The Jemez River was rapidly undercutting in such a way as to seriously menace the houses along one side of one of the principal streets, while the drifting sand was blowing into the village and blockading the streets, being in some places almost as high as the tops of the front doors and the first-floor windows. Fearing the complete destruction of their town from these two causes, during a large part of the year most of the Indians live at what is known as Ranchitos. This is the name they give to their farms which are located on the rich bottom land along the eastern side of the Rio Grande.

The direct distance from their pueblo is not very great, probably not over a dozen or 15 miles, but lack of roads and bridges make the trip a difficult one. Accordingly, when the growing season comes, most of the Indians move to Ranchitos, but a few being left behind to take care of the village until such time as the majority of the population return with the coming of the winter season. I am convinced that it would be of very great advantage for these Indians to locate permanently at Ranchitos. Their fields are capable of being well irrigated, the people themselves are desirous of making progress, and any proper influence that can be brought to bear upon them to give up the old location should be availed of. At the present time the strongest influence that could be invoked would be the erection of a schoolhouse at Ranchitos, for there is no day school provided for any of these Indians. Those that are in school are mostly in the boarding school which is conducted by the Sisters at Bernalillo. Some years ago a site for a schoolhouse was secured at Ranchitos, and a well sunk preliminary to building. No further steps, however, have been taken with regard to it, and I would urge most strongly that the plan for a school there be pushed with vigor, and a suitable schoolhouse and quarters for Government employees be erected. There are about 44 children of school age and ample provision should be made for them. They want to go to school, and should certainly be afforded the opportunity. If the schoolhouse should be built the general feeling was that the people would locate permanently on or near their farms and that the old pueblo would before long be abandoned entirely. Sentimentally possibly there are reasons against this, but when the best good of a couple of hundred Santa Ana people is in the balance, there can be no doubt as to what is the proper course to pursue.

Another place where a somewhat similar situation exists is at Acomita. The present enrollment of the school there is only 19, while there are supposed to be upward of 150 children of school age for whom no provision is made. The school is now conducted in a rented building, both inadequate and unsuitable for its purpose. A modern school building should be erected here with ample capacity for the Acoma people. The town of Acoma is located about 20 miles in an air line south from Acomita, the latter point being on the main line of the Santa Fe Railroad. There is a growing tendency on the part of the Indians to abandon Acoma and live in more accessible places. Part of the reason for this is that in the vicinity of Acoma there is very little land that is capable of being irrigated, whereas in the valley of the San Jose River, where Acomita is situated, there is a supply of water which if properly conserved will prove ample for present requirements. The Acoma people are very backward, in fact, almost resentful of anything being done to assist them. So long as there is the opportunity for them to remain in isolation at the penal of Acoma, where almost anyone can safely be hidden and escape from the influence of law and authority, there is an opportunity for them to evade their duties and responsibilities which can not but prove a most unfortunate influence upon them. Much as Acoma appeals to me, as it must to anyone having the least regard for history and sentiment, I believe that to minimize its importance is an important step in the progress of these people. Ample permanent school facilities at Acomita will tend to emphasize the importance of settlement there. Proper pressure will get more and

more of the children in the schools, and the progress of all of the people of this pueblo will be greatly enhanced.

At Santo Domingo a schoolhouse was built several years ago and at that school there is now an enrollment of 61, which is about equal to the capacity of the building. There are believed to be 250 children at Santo Domingo, so that it is evident that the educational facilities are far short of what they should be. Just at the moment, owing to the conditions arising from registration at the time of the draft, there is an unusual hold upon the Santo Domingo people, who, with the exception of those at San Felipe, are the least advanced of any of the Pueblos. Every influence that can be used to improve them should be employed, and increased school facilities at this time are among the most important of these influences. Supt. Lonergan has been alert to this, but it is impossible to expand the school with its present facilities.

I was also informed that new schoolhouses are very important at Encinal, where there is an enrollment of 16 out of 52 children of school age; at Siamá, where there is an enrollment of 30 out of 75 children; and at Picuris, where there is an enrollment of 20 out of 46. I did not have the opportunity, however, of investigating these situations at first hand.

I would further recommend the importance of a new schoolhouse at Sia. Here is located one of the old sheet-iron buildings which is cold in winter and intolerably hot all the rest of the year. In the New Mexican climate it is doubtful whether any improvement can be made as respects building construction over the adobe, the original material used by the Indians from prehistoric times. Where it is adopted, however, the sorrowful experience of the schoolhouse at Isleta should not be repeated. That building, completed a few years ago, is now fast falling into ruins, and when I was at Isleta it had to be closed because it was unsafe. This grew out of certain faults in construction which did not provide for proper ventilation, where the joist of the first floor came close to the ground, and also from certain skimping in the building. Adobe properly laid and protected with a coat of plaster is almost indestructible. If, however, the water is allowed to get in, the walls will rapidly melt and the whole building go to ruin in a very short time. It is therefore of the utmost importance that the contractors who construct such buildings should be both competent and conscientious in order that the work may be well and permanently constructed. The conditions in the Southwest are different from those in most of the rest of the country, and architects who design and supervise the erection of buildings there should have sufficient knowledge of these changing conditions and be themselves sufficiently adaptable to circumstances to enable them to conform to the requirements. He who has never been outside of Washington is not qualified for such work.

Another point at which it would be desirable for some school facilities to be provided is Chical, a settlement on the east side of the Rio Grande, about 3 miles from Isleta. Twenty families live there permanently. The distance is too far for children to walk back and forth to school. The tendency appears to be for more and more of the Indians to live near this point permanently, as much of their best agricultural land is located there. Proper school facilities certainly should be afforded.

COMPULSORY EDUCATION.

Among the Pueblos, as also among many other Indians, the necessity of a proper compulsory education law is very evident. There are but few of our modern white communities that are without such a provision, and the reasons which justify it among the whites are doubly strong among the Indians.

The law and order measure in which Commissioner Ketcham of our board is taking so much interest would provide appropriate legislation to secure this desirable end; it seems evident that further congressional enactment is necessary. The present acts of Congress provide that the Secretary of the Interior may withhold rations, etc., from Indian parents or guardians who refuse or neglect to keep the children under their care in school and also that the Commissioner of Indian Affairs, subject to the direction of the Secretary of the Interior, may make such rules and regulations as will secure the attendance of Indian children of suitable age and health at schools.

Whether the fullest advantage has been taken of this authority I have not been able to find out, but it is certain that some means much more drastic than any heretofore employed should be evoked speedily to secure better school attendance. That a little pressure will often do this is evident from the situation at Santo Domingo where Supt. Lonergan was able to use conditions arising out of the refusal of the Indians to register for the draft to increase school attendance. This I think fairly shows what might be done if Congress would pass a bill giving the Secretary of the Interior full authority, and if, thereunder, proper and reasonable regulations should be adopted which would provide punishments similar to those which are in force in most well regulated white communities at the present time. We all accept the correctness of the view that right education is the solution of the Indian problem. It is obvious that all the usual means adopted to reach the solution in that way should be put into effect immediately.

IRRIGATION.

As respects the material advancement of the Pueblos nothing is more important than the projects for improving their water supply. Much work has been done on this by the Irrigation Service of the Indian Bureau and while the amount of money spent at several of the pueblos is considerable, satisfaction can be taken in the assurance that the work has been well and economically done and the results have amply justified the outlay.

The Indians of the Southwest were our first irrigation engineers and their ability in constructing their own diversion dams, ditches, etc., is remarkable. Some of their work shows a precision in connection with grades, levels, etc., that might well be thought impossible without the use of modern high-grade scientific instruments. The demands for water at the present time, however, have increased tremendously and the white men and Mexicans are pretty sure to get more than their full share of what is available. Hence it is, if they are to successfully compete in the struggle for life, that the Indians must be assisted and more comprehensive modern methods of storage

and distribution adopted. The work of the Irrigation Service has comprised studying needs and possibilities, making accurate surveys, designing dams, reservoirs, etc., as well as their construction, the installing of head gates and other controlling devices and the building of ditches and flumes as well as advising the Indians as to improved methods of distributing the water over their lands. In addition, many wells have been bored to supply water for domestic purposes in the villages and at remoter points for stock, and many of these are equipped with windmills and tanks.

All of this has involved an infinite amount of detail, both in study and in actual construction, and much credit therefor is due Mr. H. F. Robinson, the supervising engineer in charge, and his corps of able assistants. A good deal of attention has also been given to protective work, especially along the Rio Grande, which has an unfortunate tendency at times to invade the best farming land by cutting out the banks and washing the fields away. In the first instance many of the Indians did not appreciate the value of having this phase of the situation attended to scientifically, but a little practical experience has proven to them how much better the white men's methods are than their own crude attempts, and many of them are now eager for advice and help in accordance with approved engineering practices.

Notwithstanding all of the work that has been done already by the Irrigation Service, there is still room for very much more, and there are in the office plans for a number of different projects, small indeed as compared with the great ones which the Government has launched, but of most vital importance to numerous Indians. There appears to be no diversity of sentiment as to their necessity. The principal question involved is that of money and if sufficient appropriations can be secured much can be accomplished for the permanent advancement of the people in many of the pueblos. The two most important projects which require immediate attention and involve a considerable outlay I shall refer to very briefly.

At the present time there is a good deal of friction between the Laguna people and the Acoma people owing to the distribution of the water on lands adjacent to the San Jose River. The main ditch takes its supply from the river toward the western boundary of the Acoma grant and runs down parallel to the river for a number of miles, passing from the Acoma grant on to that of the Lagunas. The complaint is made by the latter that their neighbors above waste the water, with the result there is not sufficient to meet their proper requirements and to provide the amount to which they are legally entitled.

Mr. Robinson has plans which appear to be sound, as a matter of law, by which this dispute can be adjusted without much difficulty; but even so, the amount of water is not large and the loss from evaporation and seepage is very great. The obvious way of meeting the situation is for the main ditch to be cemented through its entire length. If this piece of construction work could be undertaken and the ditch run on a somewhat higher level than where it now is in part of its course, not only would the water be conserved and the supply be sufficient for land now under cultivation but, also, it would be possible to get under ditch additional land which is very much needed. In 1917 the Acomas cultivated over 716 acres along

the San Jose River, producing crops valued at nearly \$24,000. The Lagunas have about an equal amount under cultivation.

The other important project is the construction of the two large storage reservoirs at Taos. About three-fourths of the lower of these reservoirs would be on the Pueblo grant and the balance on the Carson forest reserve, while the second or upper reservoir would be located entirely on that reserve. The site is a very satisfactory one for such a development and it is very important that these Indians should have a larger supply of water. There has recently been decided in their favor a suit by which they have recovered approximately 6,000 acres of land which had been claimed adversely to them and a very material increase in the amount of water, which they have at their command, is essential to their well being. In addition to these two large projects, there are numerous smaller ones, from the boring of a well to the development of the underground flow of a river, the details of all of which are receiving attention at the hands of the Irrigation Service. It does not seem to be necessary to go into them in detail here. Some of them are referred to in another part of this report.

AGRICULTURAL IMPLEMENTS, ETC.

In almost every one of the pueblos requests were made by the people that they might be supplied with a suitable gasoline engine, thrashing machine, flour mill, and frequently with a simple wood-sawing outfit. The importance of the Government supplying proper machinery of this sort is evident upon a consideration of the conditions. The cost will probably approximate \$1,500 to \$2,000 for each pueblo so equipped. The practical return to the Indians, however, would be very great. At the present time there are some thrashing outfits. Usually, however, where such exist they are owned by private parties whose charges for their use are very high and, frequently, the Indians are not able to secure any accommodation from them at the time of the year when their services are most needed, because, frequently, the owners are white men and the Indians are only looked after after everybody else has been amply provided for. In thrashing, usually the method of antiquity is still employed. The reaped stalks of grain are thrown upon a piece of ground which has been beaten hard, and then the ponies, or other animals, are driven around over it until the grain is trodden out. The method is, of course, wasteful and the grain winnowed in the wind is full of all sorts of filth and other foreign matter. The Indians who have been educated in the Government schools appreciate how disgustingly unsanitary is this situation and are clamoring insistently for improved methods.

Grinding is still done by hand by the women, employing the same method that was in vogue when the whites first visited the country. A modern mill, such as those with which many farms are equipped, would provide a substitute for this laborious work and will at the same time produce a meal or flour which will make much better bread.

Some of the villages where considerable hay is raised desire also the equipment of a baling machine. The same engine will be avail-

able for all of this machinery. If this equipment is to be purchased, care should be exercised that there is either some competent Indian or, preferably a Government farmer, who shall be responsible for its care and use. A moderate charge might be made to individuals sufficient to pay for the upkeep and probably for the necessary repairs. It is not practical, however, in the present status of most of these Indians, for such machinery to be purchased on a reimbursable appropriation. The Indians are too poor to be able to pay back the cost within any term of years which could be considered.

WOOD AND TIMBER.

To within a comparatively short time there was what appeared to be an unlimited supply of firewood and timber available for the use of the Indians in New Mexico. With the establishment of the national forests, many of which adjoin pueblo grants, conditions have changed and the Forest Service has interfered with the Indians securing their necessary supplies of these essential articles in regions to which they have been going from time immemorial. This is leading to serious friction, particularly latterly when, as stated to me, payments have been exacted by the Forest Service which have seemed excessive and to which the Indians seriously object, as they do also to the annoyance of securing permits, from time to time, to cut a little dead and down wood for fuel or to get out a few fence posts. Doubtless the Forest Service is entirely justified in its attitude, but at the same time it would seem as though some sort of an understanding might be arrived at between the Indian Bureau and the Forest Service by which the present method could be made more simple for the Indians and the charges waived in their case.

Certainly this would remove a good deal of friction, especially in cases where forest reserves have been located so as to include lands to which the Indians claim they have absolute title but where for some reason, actual or imaginary, it has been held that they have lost their rights. If the Government is to retain its influence, all sorts of petty annoyances must be removed and such questions as this, as they arise, must be treated practically and not with extreme technicality.

STOCK.

The need of improved stock was often apparent. Too frequently the Indian has allowed his desire for ponies to completely run away with him, and much valuable pasturage is being destroyed by herds of comparatively worthless creatures who eat up and destroy much more forage than would an equal number of really good cattle. If the number of ponies could be materially reduced (they might be shot if no other method of getting rid of them can be found), and their places on the range taken by cattle, the economic situation might be very much improved. At a number of the pueblos there is a strong demand for stallions and white-faced bulls in order that the quality of their live stock might be improved.

There seems to be good reason why the Pueblos should be encouraged in the raising of sheep. Much of their range is very well suited for this industry, and a number of them are pursuing it with success. In order that their efforts may be intelligent, and produce the most

satisfactory results they should receive constant advice as to the best breeds in which to specialize, and also more systematic methods of disposing of the wool should be adopted. It is encouraging to note that the importance of this has been recognized by the Indian Bureau, and that an appointment has been made recently of a man who is to devote more or less of his time to this subject. A well-qualified adviser who could supervise the sales of wool as well as give other advice to which I have above referred could doubtless secure for the Indians much higher prices than they have been receiving in the past for this product. Heretofore too frequently the sales have been made in a more or less haphazard way by the people themselves without any proper classification and grading of the wool with the necessary result that the prices were very much lower than would have been the case had ordinary business methods been adopted. To secure the best results, it is necessary that an experienced man should be employed who could devote his time to this highly technical line of work.

In a number of places also there is a demand for fruit trees. It is interesting to see the remains still of the peach and other fruits that were introduced by the Spaniards in comparatively early times. Many of the pueblos are located in excellent fruit regions, and there would appear to be no reason why fruit raising should not be an important pursuit.

BRIDGES.

One of the important requirements in New Mexico at the present time not only for the Indians, but for the white people as well, is a greater number of bridges across the rivers and also improved roads. Everywhere this is evident.

Through the energetic efforts of Commissioner William H. Ketcham, a few years ago Congress appropriated money for two bridges across the Rio Grande, one at San Felipe and the other at Isleta. Each of these structures is invaluable to the pueblo near which it is located, and is a constant reminder of the material outcome of the sort of interest in the Indians to further which the Board of Indian Commissioners was created and which justifies its activities. Both of these bridges are in need of repairs, and immediate steps should be taken to have them repainted and also to have new floors laid. The latter repair is particularly needed at the Isleta bridge, where the Indians have found it necessary to chink the cracks between the floor boards with small stones in order to prevent the sheep from getting their feet caught and breaking their legs. If these two matters, painting and new floors, are looked after with promptness, much heavier expenses will be avoided a little later if the bridges are to be preserved from destruction.

The approach to Cochiti is at present not direct and the temporary bridge which is being used is several miles above the village. It is quite unstable and liable to be washed away by high water at most any time. A new bridge should be provided at once, the proper location for it being farther south than Cochiti pueblo and about on the line where that grant abuts the grant of Santo Domingo. This site would place the bridge in such a position as to be available by the Santo Domingo Indians also in reaching their fields which are

on the western side of the Rio Grande. At the present time it is necessary for them to make a round trip from 20 to 30 miles each time they go to their farms so located, whereas the proposed location would reduce this distance to not more than one-fourth of what it is at present. This bridge would also be a convenience to others than the Indians, as it would be near to the town of Pena Blanca, and it is probable that some cooperation can be secured with the State authorities in connection with its cost and maintenance.

Another important bridge across the Rio Grande would, roughly speaking, connect Santa Clara and San Ildefonso. Its proper site would probably be just below the Black Mesa. It would afford access to Indian lands on both sides of the river from the two pueblos, respectively, which are now very difficult to approach. This bridge also would be a great public improvement, and a little endeavor would doubtless secure State assistance in its construction. There is a great deal of local demand for it.

The villages of Jemez and Sia are both located on the Jemez River. This stream is exceedingly treacherous, as bad quicksands develop with great rapidity in its bed, making crossing at all times difficult and at some times very dangerous. The only available bridge at the present time is at San Ysidro. This bridge is not well located, although it is about midway between the two pueblos. The difficulties of constructing another bridge across the Jemez River are considerable but not insurmountable. In order to meet certain local conditions it seemed to be thought that if the Government were to erect a bridge not far from Sia, which would be of very great value to the Sia people, owing to its advantage to the general public the county authorities would remove the present bridge from San Ysidro farther north so as to be much more convenient for the Jemez people. This plan would probably result in an improvement which would be mutually advantageous. The people at Sia are very much opposed to having the bridge located anywhere else than immediately at their village. From the engineering standpoint, however, it is stated that such a location is not a wise one, though doubtless it would be much more convenient to the Indians living there.

CARE OF PROPERTY SUPPLIED BY THE GOVERNMENT.

An important matter for all the Pueblo Indians to appreciate is their own responsibility toward property which may have been supplied to them by the Government. As a case in point, in one of the towns where the Government had driven a well and supplied a pump, complaint was made to me that they were short of water because the handle of the pump had become broken and hence it was useless. No one seemed to have had the enterprise to purchase a new handle, which at the nearest market would have cost perhaps 75 cents, and thereby put the pump in good order. Everyone was waiting for the Government to do this. It would seem to me that some systematic means should be employed of impressing upon the Indians the necessity of their being responsible for the care of such appliances after the Government has provided them. The person who is probably closest in touch with them in such matters would be the farmer, and if he should be an energetic man who was alive to his trust and responsibility, with a little tact he could easily see

that matters of this kind were attended to speedily by the Indians themselves. Excellent and civilizing lessons might be taught in this way.

THE OLD CHURCHES.

There is one sentimental matter as to which there is probably nothing which can be done by the United States authorities and yet it must appeal very strongly to anyone who is interested in the history of the Pueblos, and who is desirous of preserving all of their inheritance which is of value. I refer to the condition of a number of the old mission churches which are among the most interesting of the relics of the past still existing. A number of these are in need of repairs and unless something is done in the near future the buildings will be very seriously damaged if they are not entirely reduced to ruins. While it is not probable that the exact history of any of them is known, yet there are several that approach 200 years in age or even more than that. The Indians are very proud of them and guard them most zealously, and in fact often dispute with the authorities of the church as to their real ownership, as they claim that they are tribal properties over which the church has little actual control. At the same time the Indians are unable, through lack of financial means, to have made the repairs which are essential to the preservation of these really noble monuments. There are some lamentable instances where money has been secured from outside sources and the churches repaired in style entirely out of keeping with their original architecture, the effects being in some cases almost grotesque. I believe it is well worth while to consider whether it may not be possible to find some means by which these church edifices can be put into good repair in keeping with their original style without in anywise doing violence to the feelings of anybody.

In saying this, however, I do not wish it to be supposed that I have any sympathy with the extreme sentimentality of certain classes in our community who would do nothing to civilize the Indian, because we should thereby take away from him a certain veneer of unwashed picturesqueness which appeals to the artistic temperament. During the period that I was in Albuquerque one of the newspapers there published an attack upon the Board of Indian Commissioners and its work, contending that our interests were to take away from the Indian all of his contribution to the fine arts and give him nothing but a commonplace and squalid civilization in its stead. In this article the contention was made that Indian music is equal to the best of that of some of the world's greatest composers. There is doubtless much that is very appealing in certain directions that can be seen among the Pueblo Indians, and while we should be ready, as Dr. G. Stanley Hall has urged in one of his addresses, to accept and retain all that is good in all civilization, on the other hand, if we are to be true to the light that has been given us we must supply all dependent peoples what is highest and best in our civilization. If by that contact it comes to be that they wear their hair neatly trimmed and the ordinary clothing such as we adopt rather than blankets, while they may not serve so well as artists' models, who can doubt that in the long run that they and we, too, are better off?

With the number of these pueblos and the great diversity of conditions existing at the different ones, it would be possible to elaborate

this report to a very much greater extent than is desirable. According to recent figures, the total population was 8,271, of whom 7,827 were full bloods. About one-half speak English and all wear citizens' clothing. The estimated gross acreage of their lands is nearly 600,000¹ acres, while their property aggregated a total value of about \$6,000,000; \$1,800,000 of this is individual and the rest tribal. Their live stock is valued at upward of \$1,250,000. It is estimated that 335 are suffering from tuberculosis and that nearly 1,000 have trachoma. Health problems are therefore serious, and it is sincerely to be hoped that it may now be possible to secure more medical attention for them since the demand made by the war has ceased. I shall not, however, venture further into details, but submit herewith summaries in which the recommendations already made are stated in connection with each of the pueblos, and also some matters not referred to in this main report but which are more specific in their character, are referred to in detail.

ACOMA.

The principal grievance of these people at the present time respects the loss of a considerable part of their original grant which was made to them by the Spanish Crown in 1689. There appear to have been some sales by them and a confusion of locations which have seriously reduced the amount of their land and bring the line on their southern border to within about 200 yards of the penal of Acoma. There seems to be considerable hardship in this situation, but they have been decided against twice by the surveyor general. The Indians have certain inaccurate information as to where their lines should run, growing out of the fact that they have confused the boundaries of the old San Estaban Mission with the boundaries of their grant. This has been explained to them but they either will not or can not understand the situation.

I have been informed that the decision of the surveyor general was against the weight of the evidence presented to him. If there is any way by which this matter could be opened up again and the decision reviewed and some method found by which the lost land could be restored to the Pueblos, it would be a very great advantage.

There was explained to these Indians by Supt. Loneragan when I was there the importance of their securing and registering cattle brands in order to assist in the apprehending of stock thieves. The Acomas should be supplied with a cattle rider, at a probable expense of about \$1,500 per annum, who could protect their stock from such depredations.

COCHITI.

There is much difficulty here from the encroachments of the Rio Grande, which is cutting seriously into the fields. The people are dependent on farming for their living and have themselves done considerable work on making dikes, etc., in which they have been materially assisted by Mr. Robinson and the Irrigation Service people. There are many beavers here which are cutting down the cottonwood trees along the river, thus tending to destroy what nature

¹ Probably this figure is misleading and does not take into consideration the numerous losses through trespassers and squatters.

has supplied to hold the banks together. If they were to have a high line ditch on each side of the river a very considerable amount of their land might be cultivated where now they have no water.

Some of these people have traded in turquoise in the Navajo country, but recently this has been interfered with by the superintendent there. I did not go into the merits of this controversy, but it would seem as though there should be no standing regulation which would prevent any legitimate line of business.

An unusual complaint was made against the Government school here. The Cochiti people are very anxious to have all their children educated. The teacher has no facilities for taking care of small babies and some parents did not like it because they could not be received at school.

ISLETA.

The road through the plaza is a great disadvantage and very dangerous owing to the rapid rate of speed at which motors are frequently driven. I personally observed this. The Indians should be encouraged in their endeavors to get this road relocated at a point that would pass around the edge of the village. They have done some work with regard to this.

Land north of the village which was fertile some 20 or 25 years ago is now water-logged so that it can no longer be used for agricultural purposes. Various reasons are alleged to account for this and possibly the real cause is a combination of all of them. These include increased irrigation of lands above, the excess water draining down into the Indian land; the raising of the river by the deposit of silt; the confining of the river by certain dikes to protect the railroad; the flood system of irrigation used in the valley; the discharge of an irrigation system used by the Mexicans farther to the north. In any event, whatever the cause, some method of draining this land should be adopted.

The necessity of more water for stock and of water for domestic purposes in the land which has recently been fenced and used for dry farming is urged by the Isletas. The plan of drilling wells about every three miles for these purposes was suggested. If this is practical the request is an eminently proper one. It is possible that spring water from the Manzano Mountains might be piped on to some parts of the eastern tract to better advantage than to bore wells.

The complaint was made that the intakes to the irrigation ditches on the east side of the river clog with silt very often. If this is not due to some defect in their construction it is a condition which the Indians should meet themselves. The river is heavily loaded with silt and the probabilities are that the condition is one which is incident to the character of the water.

The necessity of a school at Chical or of a bus to transport the children to the school at Isleta has been referred to in the main report, the distance being too great for them to walk. The suggestion of a bus is made upon the supposition that the bureau will have the school at Isleta immediately put into habitable condition.

All the Indians at Isleta are Roman Catholics and they made the request that in selecting teachers to have charge of their schools those of that faith be chosen. As a reason for this they state that the ex-

ample set by the teachers to the children respecting church attendance would be very helpful.

JEMEZ.

Jemez requires more irrigable land. A new ditch on the village-side of the Jemez River at a higher level would enable the Indians to bring under cultivation a great deal of good agricultural land which now is not available. They also need help in the diking work along the river to prevent its further encroachments as well as a head gate on the westerly side of the river. I would raise the query whether it might be possible to develop for some of their requirements the underground flow of the Rio Chaquito. Wells in this region have not been successful, and water for domestic purposes is scarce.

Their crops are good but sell for very low prices, while supplies are very expensive. The principal reason for this is the poor character of the roads. Conditions will be improved if the recommendations in the main report respecting bridges across the Jemez River should be carried out.

It is interesting to note, in passing, that these Indians formerly made a great deal of wine. Some of their old vineyards are still to be seen. A number of years ago the making of wine was stopped, and since then they have improved very materially.

LAGUNA.

The general irrigation situation affecting Laguna and its subsidiary villages has been dwelt upon at length in the report. These people are anxious for a dam to be constructed in the Rio San Jose, just south of the railroad tracks and near Laguna station. It is doubtful whether this is practicable, as the expense would be disproportionate to the amount of land that can be reached. This, however, is a matter for investigation. At Mesita there is a great need for a good supply of water for domestic use. Two windmills were suggested. At the present time water has to be hauled 6 miles for all the household purposes, making a round trip of 12 miles. The diversion dam at this point also is in bad shape.

At Paguate some recent work has been done on the storage reservoir and head gate which should be a very great improvement to the conditions, although the reservoir is very small. The Irrigation Service is about making an investigation as to whether there is not a better site for a dam farther up the stream. There are many fine fields near Paguate, most of which are included in the controversy with the Mexicans over title to the land, and it is to be hoped that everything possible will be done to secure a favorable outcome of that controversy.

The people suffer a great deal from their cattle being stolen. If there could be an inspector of pelts or a cattle rider appointed much of this might be prevented.

Some years ago the Government spent about \$12,000, out of an original limit of \$17,000, for the erection and equipment of the sanatorium at Laguna. It is used largely for tubercular patients who are sent there from many reservations, some of them as far off as Wyoming or Montana. The equipment is very poor and should be

speedily improved. One of the greatest needs is the installation of modern laundry machinery as to which there should be no delay. In view of the number of the Laguna people and the way in which they are scattered in several villages another doctor should be supplied.

The Laguna people are very anxious to have a general permit to cut timber on Mount Taylor. They now have to get a special permit for each time they need logs. This matter is referred to in the general section of this report.

NAMBE.

The Nambe people appear to be getting along fairly well, although they are suffering keenly from an insufficient supply of water as a result of a court decision. Steps might be taken to develop the underground flow at this point.

There is also much encroachment, largely by Mexicans, both on the agricultural land and on the range. These matters will doubtless receive the attention of the attorney for the pueblos.

There are about 26 children at Nambe, but no school facilities whatever. A schoolhouse should be provided for them. (See main report.)

There should be a policeman at Nambe.

SAN ILDEFONSO.

The importance of a bridge over the Rio Grande near this pueblo has already been dwelt upon. The San Ildefonso Indians have suffered very great losses through squatters on their land, possibly more than any other of the pueblos. At the present time they are much harassed by trespassing cattle, etc., and should have one or two policemen to look after all such matters.

They also are very short as respects wood and timber. To the west there is a forest reserve from which, it would seem, that there might be some provision made for them.

A very interesting water situation has been developed here by the conserving of the underground flow of the Rio Pajuaque, which flows by gravity out of the reservoir sunk in the bed of the river. If the grades are such as to make it possible, I would suggest that this excellent supply be conveyed by a pipe to the center of the village for domestic use. It is much superior to the well water now relied upon.

SANTA CLARA.

The most important matter which is at present disturbing the Santa Clara Indians is that of their so-called second Spanish grant. This covers certain land which they purchased in 1793 from Juan de Tofoya. This grant the Indians claim was supposed to cover about 90,000 acres of land, most or all of which is now included in the Jemez Forest. The case has been before the Court of Private Land Claims and decided adversely to their contention. This appears to have been partly upon the ground that their grantor did not have good title, and, also, partly possibly on the construction of the mean-

ing of certain expressions contained in the grant. In any event, there can be no doubt but what the Indians made a purchase and paid cash, and, for a long time, occupied the land, and it seems as though it were a very small matter on the part of the United States Government for it to take this large tract as a public forest without any redress being afforded. The Indians naturally feel very bitter with regard to it, and it is a subject which will undoubtedly cause more friction.

Another land difficulty is that of the overlapping of the so-called Baca location, and still another the Smith sale of a part of the original grant from the Spanish Crown in 1689. In this latter case the Indians gave a deed which they thought was for a right of way only, and this was stretched until it came to include a very large amount of the agricultural land lying near the Rio Grande. Probably it is too late now to reclaim any of this, and yet it would seem there ought to be some possible way of righting this injustice.

Generally they need more water for purposes of irrigation.

Between Santa Clara pueblo and the town of Espanola has grown up the Mexican settlement of Guachipangi. This is undoubtedly on what was originally Indian land, and the suits that are to be brought by Judge Hanna may determine that some of it can be recovered for the Pueblos. The water for this vicinity comes from the Rio Santa Clara, and under present conditions the Mexicans get water three days a week and the Pueblos get it four days; but the Mexicans are getting more and more land under cultivation year by year, and taking more water, with the result that the Santa Clara people are gradually being squeezed out. This situation needs decisive action at once in order to secure to the Indians what there may be left to them.

The Santa Clara people had another complaint which was different from any that we heard elsewhere. On their grant are included the Puya Cliffs, one of the best known of all of the prehistoric ruins of New Mexico. The tradition is that the inhabitants of these old cliff dwellings were the ancestors of the Santa Clara people and they strongly object to their ancient cemeteries being disturbed and the graves disinterred by relic hunters. They wish all work of this sort to be discontinued and the ruins to be preserved as a memorial to their ancestors. They suggested visitors might be charged a small fee under the supervision of the Indian policemen, which would create a fund for some good purpose in the pueblo.

While the desire of archaeologists to discover what they can respecting the life and customs of the past is praiseworthy, there do seem to be considerations of decency involved which would make it wise not to disturb these ancient dwelling places without proper regard for those who are living. There surely are none of us who contemplate with satisfaction the desecration of any of the cemeteries in which we are to-day burying our relatives or where our forefathers have been interred, and we certainly should accord to the Santa Clara people the same sort of consideration in this respect which we should wish to receive ourselves.

I take it that a little tact on the part of those who have wished to make the excavations would have avoided all criticism, and it seems to me the crux of the situation has been that the Indians are convinced that the graves of their ancestors are being exploited for the pecuniary advantage of those who have made the excavations.

This certainly should stop. Some method can doubtless be devised which would be acceptable to the Indians and yet provide any proper scientific opportunity which might be desirable.

SAN JUAN.

San Juan presents peculiar difficulties owing to the internal dissensions which have been referred to at large earlier in this report. Undoubtedly the people are suffering from need of more land that can be put under irrigation, and from serious trespass by Mexicans and others. If a new ditch were to be constructed on a high level, it would make available a very considerable amount of land which is now desert. The employment of two policemen to look after trespassing and the cutting of wood on the reservation would be most desirable. At the present time there is a scarcity of timber, yet the Mexicans cut the cottonwood trees along the river which is a great disadvantage as it allows the banks to be cut out more readily at times of high water. The Indians themselves, at the same time, are very short of fuel and also timber for construction purposes. The trespassing of the Mexicans should be stopped and there should be granted to the San Juan people more comprehensive privileges as respects getting their necessary supplies from the adjacent forest reserve.

SANTO DOMINGO.

The Santo Domingo Pueblos are very unwilling to do anything looking toward progress and say they will not accept anything from the Government. Evidently some one has been poisoning their minds and they are convinced that should the Government do anything for them it will make them subject to taxation in a way which they are not able to bear at the present time. Notwithstanding their opposition, as recommended above, there should be a bridge across the Rio Grande, the best location of which probably being at the upper edge of their grant.

The one serious complaint they made was that they are compelled to pay the United States Forest Service for wood and timber, which seems unfair.

They do not care to have the Government farmer with them, but his influence is doubtless on the right side and if a thrashing machine and mill are supplied here his presence would be necessary.

SAN FELIPE.

Because I was at San Felipe on a fete day it was not possible to have a meeting with the governor and principales. I talked with a number of people, however. It is interesting to note that in the past seven years these Indians have nearly doubled the area of land they have under cultivation. They should be furnished with the usual equipment of agricultural machinery recommended for the other Pueblos and some one should be detailed to this point to take care of it. As recommended above, the bridge over the Rio Grande needs painting and a new floor.

There is one serious difficulty in matters of administration at San Felipe which may apply also to other pueblos. Every individual

has two names, his Indian and his Christian name. Frequently they do not know their own Christian names or those of their parents. It can readily be seen how this leads to confusion.

SIA.

Sia is quite inaccessible and is not often visited by anyone outside of the Government employees whose business actually compels them to go there. There is a shortage of tillable land, that on the east side of the Jemez River having more alkali in it and therefore being much less desirable than that on the west side. As above recommended, there should be a bridge near here crossing the river. The ford is exceedingly treacherous and the day I was there the governor of the pueblo nearly lost his life in trying to find a way that I could get across the river on my return to Albuquerque.

This pueblo has nearly 350 head of stock. The range is very poor and the Indians need more pasturage, especially to the west. The situation is complicated by the fact that the alternate sections are railroad land. If these railroad sections could be consolidated, as has been suggested among the Navajo, it would be much to the advantage of everyone. A number of the Indians find there is not sufficient land left for them in their own grant and for a good many years have been occupying other lands that are on the public domain. Steps should be taken at once by which they could file for homesteads in order that their rights might be protected.

There should be an irrigation ditch on the west side of the river.

The domestic water supply is very poor and should be improved.

This would seem to me a good region to further interest the Indians in the cultivation of fruit, especially apples, peaches, and pears. To supply them with some fruit trees would be desirable.

TAOS.

The water situation at Taos has been considered elsewhere. It is the most important matter at the present time. It is important to these people that they have a competent farmer to have charge of the thrashing outfit, gristmill, and sawmill which ought to be supplied them. Two policemen should be appointed to look after stock and trespassing and who also could act as attendance officers for the school. At the present time the Indians hire their thrashing done. Harvest comes early in September and they frequently have snow by the middle of that month.

The Forest Service is charging the school at this point 50 cents a cord for green firewood. This appears to be outrageous.

Taos was the one pueblo I visited where I heard anything of peyote. It has been recently introduced, and in a year the number of users has increased from about 14 to some 30 or 35, mostly young men. They hold regular peyote services once a week, but use the bean at other times, and also, as I was informed, administer it to the sick. This is an indication of the spread of this insidious practice and shows the importance of the legislation heretofore urged to control it.

There is much opposition in the pueblo to one of their number who does not wish to dress in the regular Pueblo clothing, but has adopted the garb of the white men. His life has been made very

wretched by the petty persecutions to which he has been subjected. It seems to be another indication of the desire of the younger men to break away from the old tribal customs, a subject which has been treated more at large elsewhere. The authority of the pueblo officials is also involved.

It is quite probable that the influence of the Artist Colony, as it is known, can also be traced here. The picturesque Indian of the blanket makes a good model, while the Americanized farmer, plowing or reaping in his field, is not so available for that purpose. While I would not be considered as charging that the artists intentionally interfere with the progress of the Indians, there can be no doubt that they are not sympathetic toward any movements which tend to alter aboriginal conditions. Probably the Taos people themselves realize this as well as anybody, for they do not hesitate to state, when they get confidential, that they find the "easy money" that they can make for acting as models very attractive. In the final analysis probably this is the crux of the situation.

Bulls and stallions should be provided at Taos.

TESUQUE.

There is no school at Tesuque, most of the children attending St. Catherine's Boarding School at Santa Fe, but a few miles distance. Tesuque Indians are much harassed by trespassing and stealing of water; each year a little more is taken from them. They seem to be unable to protect themselves. They need range land for cattle, which might be arranged for on the forest reserve to the east.

Respectfully submitted,

GEORGE VAUX, Jr.,
Member, Board of Indian Commissioners.

APPENDIX Q.

REPORT ON THE SCHOOLS AMONG THE FIVE CIVILIZED TRIBES OF OKLAHOMA, BY WILLIAM H. KETCHAM.

JUNE 1, 1919.

HON. GEORGE VAUX, JR.,

Chairman, Board of Indian Commissioners.

SIR: Having been authorized by the Board of Indian Commissioners to visit the schools of the Five Civilized Tribes of Oklahoma, to make personal observations as to the local educational facilities available to the children of these tribes and to submit recommendations concerning the same, I have the honor to report as follows:

The question of adequate educational facilities for the children of the Five Civilized Tribes, to wit, the Cherokees, Choctaws, Chickasaws, Muskogees or Creeks, and Seminoles, is one that demands immediate consideration.

Section 10 of the act of April 26, 1906 (34 Stat., 137, 140), authorized and directed the Secretary of the Interior to assume control and direction of the schools of the Five Civilized Tribes and to conduct such schools "until such time as a public-school system shall have been established under Territorial or State government, and proper provision made thereunder for the education of the Indian children of said tribes." It also authorized him to set aside a sufficient amount

of any funds in the Treasury of the United States belonging to said tribes to defray all the necessary expenses of said schools, "using, however, only such portion of said funds of each tribe as may be requisite for the schools of that tribe, *not exceeding in any one year for the respective tribes the amount expended for the scholastic year ending June thirtieth, nineteen hundred and five.*"

As proper provision under State government for the education of the children of said tribes has not yet been made, and can not be made for several years, the schools of these tribes would be secure but for the fact that in the closing out of tribal affairs there appears to be no effort to conserve even for a time sufficient tribal educational funds for maintaining the few remaining institutions in which the Five Tribes hitherto have educated, and still educate, many of their children.

As for the Cherokees, they no longer have an educational fund and the one tribal school still maintained for them is supported by a direct appropriation from the Treasury of the United States. There may be question as to whether Congress will be willing to pursue a like policy in regard to the schools of the other tribes, in view of the fact that they still have educational funds for the conservation of which provision could be made. This is particularly true of the Choctaws and Chickasaws, whose coal royalties now support their schools, and legislation could be enacted that would insure them tribal educational funds for so long a time as the schools may be necessary.

Formerly the schools of each of the Five Civilized Tribes were more numerous by far than they are to-day.

The Five Tribes schools at no time have been under civil service, although at present a number of the employees are from the civil service. Those in charge of the schools do not agree as to whether civil service or the existing status is more desirable. It is said that unhampered by civil service it is easier to obtain capable employees who are acquainted with the country and the people, and hence are more efficient. Others contend that under civil service it would not be so difficult as it is now to retain employees, and that under existing conditions it is impossible at times to find trained workers for the frequent vacancies that are made by the resignation of employees who feel no obligation to consult anybody's convenience but their own. I believe, however, the majority prefer the existing status.

The schools of the Five Tribes which are still maintained and certain information concerning them are set out in the following tables:

TABLE I.—*Tribal schools.*

Tribe.	School.	Location.	Grades.	Capacity.	
Cherokee....	Cherokee Orphan Training School.	3 miles from Park Hill..	6	160	Boys and girls.
Seminole....	Mekuskey Academy.....	5 miles from Seminole...	6	100	Do.
Creek.....	Euchee Boarding School....	Sapulpa.....	6	100	Do.
Do.....	Eufaula Boarding School....	Eufaula.....	8	112	Girls.
Do.....	Nuyaka Boarding School....	12 miles from Boggs.....	6	115	Boys.
Chickasaw...	Bloomfield Seminary.....	Ardmore.....	8	80	Girls.
Choctaw....	Jones Male Academy.....	4 miles from Hartshorne..	8	100	
Do.....	Armstrong Male Academy....	4 miles from Bokchitto...	8	100	
Do.....	Tuskahoma Female Academy,	4 miles from Tuskahoma..	8	110	
Do.....	Wheelock Female Academy..	1½ miles from Millerton..	8	100	

TABLE II.—*Tribal contract schools.*

Tribes.	School.	Location.	Grades.	Contract.	
Choctaw.....	Old Goodland Indian Industrial School (Presbyterian). ¹	3½ miles from Hugo.	8	80.....	Boys and girls.
Do.....	St. Agnes School (Catholic)...	Antlers.....	8	45.....	Do.
Choctaw and Chickasaw.	Murray State School of Agriculture (State Institution).	Tishomingo...	12	50 Choctaw; 50 Chickasaw.	Do.
Do.....	Oklahoma Presbyterian College for Girls (Presbyterian).	Durant.....	12	25 Choctaw; 25 Chickasaw.	Girls.
Do.....	St. Agnes Academy, Girls' Department (Catholic).	Ardmore.....	12	50 Choctaw; 60 Chickasaw.	Do.
Do.....	St. Agnes Academy, Boys' Department (Catholic).	.....do.....	8	35 Choctaw; 50 Chickasaw.	Boys.
Do.....	St. Elizabeth's School (Catholic).	Purcell.....	12	30 Choctaw; 30 Chickasaw.	Girls.
Do.....	St. Joseph's School (Catholic)...	Chickasha.....	12	15 Choctaw; 10 Chickasaw.	Boys and girls.
Do.....	El Meta Bond College (private institution).	Minco.....	12	12 Choctaw; 35 Chickasaw.	Do.

¹ Under Presbyterian auspices.

I visited Jones Male Academy, January 2, 1919; Tuskahoma Female Academy, January 4; St. Agnes School, January 5; Oklahoma Presbyterian College for Girls, January 6; Armstrong Male Academy, January 7; Wheelock Female Academy, January 9; Old Goodland Indian Industrial School, January 10; St. Agnes Academy, January 11-13; Bloomfield Seminary, January 14; Murray State School of Agriculture, January 15; St. Elizabeth's School, January 16-17; St. Joseph's School, January 18; El Meta Bond College, January 18; Eufaula Boarding School, May 18; Cherokee Orphan Training School, May 19; Euchee Boarding School, May 20-21; Nuyaka Boarding School, May 21-22; Mekusukey Academy, May 25-26.

On May 24 I conferred with Mr. A. S. Wyly, supervisor, Five Civilized Tribes schools, and Mr. Calvin Ballard, day-school superintendent, Five Civilized Tribes.

Hon. William F. Semple, principal chief of the Choctaw Tribe of Indians, accompanied me to the Tuskahoma Female Academy, St. Agnes School, and the Oklahoma Presbyterian College for Girls. Mr. Jules Schevitz, secretary of the Oklahoma Tuberculosis Association, accompanied me to the following institutions: Jones Male Academy, Tuskahoma Female Academy, St. Agnes School, Eufaula Boarding School, Cherokee Orphan Training School, and Euchee Boarding School. In each school he addressed the student body on fundamental health topics and interested both pupils and faculty in the health crusade now being inaugurated among the school children of Oklahoma.

I was impressed by the good judgment of the Indians of a past day exercised in selecting sites for their schools. They invariably chose the "beauty spots" of the sections in which the schools are located.

All but three of the schools made a most favorable impression on me. Changes that recently have been made of superintendents probably will improve conditions in two of these. It remains to be seen if it will not require a change of superintendent to cure the ills of the third school.

I believe there should be a good stockman in each of the national schools, particularly the boys' schools. Successful stock raising, farming, and fruit culture would go a long way to support these institutions.

In every instance I recommend for the schools the various improvements that are classed under the head of "needs." These recommendations, however, are predicated solely on the assumption that the schools are to be continued for a number of years. If the schools are to be discontinued after one or two years, to make any improvements will be nothing but a waste of money.

Jones Male Academy.—The superintendent of this school advocates the addition of the high-school course, which, he says, would insure more Choctaw boys making the 12 grades. At present they are inclined to give up their studies after they have completed the eighth grade. He has improved the school farm and believes it would be possible to provide very materially for the support of the school through the development of the farm. I am informed the tribal officials of the Choctaw and Chickasaw Nations have recommended that sufficient land be set aside from segregated coal and asphalt lands to make up a tract of 640 acres for Jones Academy. This is something that should be done, as the school at present has only 160 acres. Needs: A separate school building should be erected and the old buildings should be put in good repair.

Tuskahoma Female Academy.—The superintendent of this institution advocated the raising of the grades of the school from 8 to 12. The school building was destroyed by fire and the insurance money on this building was put into the tribal fund. I suggest, if it be practicable, that this money be used toward putting up a new building. Needs: A new school building; a 10-room cottage; a cow shed.

Armstrong Male Academy is the oldest of the national schools, having been founded in 1856. Mr. Edward A. Porter, special supervisor in charge at the time of my visit, was giving particular attention to the industrial features of the school. He showed me some fine hogs and a herd of Holstein cattle. Needs: New equipment, as the furniture is much worn and dilapidated; steam heat; up-to-date machinery; recreation rooms for the large and small boys; a silo; new toilets; the light plant should be enlarged.

Wheelock Female Academy.—Miss Minta R. Foreman, a Cherokee, superintendent of Wheelock, is making a fine record. Although this is one of the oldest of the Choctaw schools and the buildings are all of frame, they are in better condition than most of the modern buildings of the other schools. Neatness and cleanliness were everywhere in evidence. There are only 40 acres in the school plat proper, although there are 130 acres of hay land some distance from the school. The dairy barn and all buildings are in first-class condition. Needs: A new furnace; another school building; cottage for employees; a truck; the superintendent has asked for money to enlarge the warehouse and kitchen and make the upper story of the building a dormitory for small girls; as the country around is low and very muddy at certain seasons of the year, it is very important that a good road be made into Millerton.

Section 10 of the act of April 26, 1906 (34 Stat., 137, 140), limits the Secretary of the Interior, in his expenditures of any funds in the Treasury of the United States belonging to the Five Civilized Tribes for the maintenance of the schools of these tribes, to an amount of said funds of each tribe "not exceeding in any one year for the respective tribes the amount expended for the scholastic year ending

June thirtieth, nineteen hundred and five." As in the course of time it has been necessary to put up new buildings, to replace some that have been burned or properly to carry on the work of the respective schools, the amount expended for the maintenance of the schools of certain tribes *for the scholastic year ending June 30, 1905*, has proved to be insufficient, *and this is particularly true of the Choctaw schools.*

I, therefore, urge that Congress make provision for the use of such an amount of Choctaw funds over and above the amount expended on the Choctaw schools for the scholastic year ending June 30, 1905, as the Secretary of the Interior may find it necessary to expend for the efficient conduct of the Choctaw schools.

Bloomfield Seminary.—Miss M. Eleanor Allen, the very efficient superintendent of this school, has made a marvelous improvement in the appearance of the old building that was purchased for the institution. To carry out her plans, there are the following needs: An annex, which would cost \$5,000, to each of the two small dormitories; a building that would provide space for dining room, kitchen, employees' room, and a suite of rooms adjoining the dining room for domestic science work, the cost of which would be about \$25,000; a dairy barn; more land, as the school has only 2 acres, which is insufficient. With these improvements, the Bloomfield school plant would be ideal.

Miss Allen advocates a school matron for the Chickasaws, whose duty it will be to visit the homes of the Indians and induce them to send their children to school.

While in all the schools there are many Choctaw pupils, it is remarkable how few Chickasaws, particularly full bloods, are to be found. Even on the assumption that a large number of the Chickasaw children, particularly part bloods, and possibly a goodly number of full bloods, are in the public schools, it is evident that a great many full-blood Chickasaws are not attending school.

Several superintendents spoke in very high terms of the former school representative for the Choctaw Nation, Mr. Henry F. Cooper. They lauded his energy and interest in his work and commented on his success in bringing back runaways and in persuading parents to send their children to school. One superintendent said "he literally beat the bushes" to round up the children for school.

St. Agnes School.—This school, conducted by the Sisters of Divine Providence, has an average attendance of 46 pupils—boys and girls. It was found to be neat, clean, and homelike. The Sisters have admitted a comparatively large number of small boys.

Oklahoma Presbyterian College for Girls.—This college is well equipped, has substantial buildings, and offers opportunity for high-school work. It also has a commercial course. Indian and white girls attend together. Dr. W. B. Morrison, the superintendent, is a scholar and a school man.

Old Goodland Indian Industrial School.—The superintendent of this school, Rev. Silas Bacon, and the principal, Mr. Hampton Kanyaubbee, are full-blood Choctaws. The school presented a very neat appearance. The pupils are mostly full bloods. The new hospital building is commodious. This school owes its continuance to

the devotion of Rev. Mr. Bacon, who for years has put into it his personal resources. The principal, although a young man, seems to be imbued with a like spirit of devotion. The Old Goodland school serves a very useful purpose, especially for full bloods, and the Presbyterian church authorities will make no mistake in being generous in their allowances to it.

St. Agnes Academy, Girls' Department, is conducted by the Sisters of Mercy, whose work is well known and appreciated throughout the Choctaw and particularly the Chickasaw country.

St. Agnes Academy, Boys' Department, under the direction of Rev. James J. Wallrapp, is popular and well patronized.

St. Elizabeth's School, conducted by the Sisters of St. Francis, is one of the oldest educational institutions in the Chickasaw country. From the beginning it has done particularly good work. In addition to the high-school course, it offers opportunity for a two years' commercial course.

St. Joseph's School, conducted by the Sisters of St. Francis, has only a small number of Indian pupils, but it affords, in a limited way, accommodation for Choctaws and Chickasaws in the vicinity of Chickasha who desire to educate their children in this school. In addition to the high-school course, it also offers the advantages of a commercial course.

El Meta Bond College is a private school, having been founded some 29 years ago by Mrs. Meta Chestnut-Sager. This good lady has devoted her life to the institution, which owes its existence and the results it has accomplished solely to her determination. She points with pride to several of her former pupils who have "made good" in the truest sense of the word.

Murray State School of Agriculture is well equipped. Under the present superintendent, R. M. McCool, it gives evidence of efficiency and genuine work and offers exceptional advantages for Choctaw and Chickasaw pupils. Through the efforts of Hon. William H. Murray, who at the time represented the fourth congressional district of Oklahoma, in the Indian appropriation act approved March 2, 1917, \$50,000 was appropriated by Congress out of Chickasaw funds for two dormitories, one for boys and one for girls, at this school, "for the accommodation of Chickasaw children, and, in the discretion of the Secretary of the Interior, for any other pupils attending said school." Later, in the Indian appropriation act approved May 25, 1918, Congress appropriated an additional \$15,000 for this purpose. At the time of my visit, these dormitories were nearing completion. They were of brick, well arranged and of good architectural design. Title in fee to the sites on which these dormitories have been built has been conveyed by the town of Tishomingo to the Chickasaw Tribe in compliance with the act of Congress of March 2, 1917, which provides "That this appropriation shall become available after the said city of Tishomingo shall have donated and conveyed by fee simple title to said tribe suitable and necessary sites upon which same are to be constructed."

Cherokee Orphan Training School.—This school seems to have deteriorated within the last years. The present superintendent is improving conditions as best he can under existing circumstances. He is handicapped because of the difficulty of maintaining a full force of employees. He contends that the school should be made an

eight-grade school, and in this I agree with him. Needs: The school has only 180 acres of land, and should have more, and there are two 10-acre tracts near by, which could be purchased, one for \$650 and the other for about \$400; a new dormitory (this has been provided for in the Indian appropriation act, May 25, 1918, out of the funds, which it is estimated will be sufficient, that will remain to the credit of the Cherokee Tribe after all claims against the tribe have been adjudicated, December 25, 1919, being fixed as time limit for final settlement); a gymnasium should be built and the present assembly hall converted into two classrooms; there should be a new employees' lodge which would have room in the basement for dining room and kitchen, and the present dining room and kitchen should be turned into a play room; a position should be created that will combine the duties of dairyman and gardener, and another that will combine the duties of assistant cook and dining-room matron; an additional teacher should be appointed, so that the disciplinarian will not have to teach, as is the case at present.

At the present time the children of the Cherokee Tribe are seeking entrance into nonreservation and other Indian schools, where they can not have the same home advantages they formerly enjoyed. In fact, the Indian school at Wyandotte in the Quapaw Superintendency is being continued largely for Cherokee pupils.

Until recently, the Cherokee school has issued a periodical in English and Cherokee, but the publication is now discontinued, and I am told there is only one person living who is able to set up the Cherokee type. If this be true, provision should be made at once for training several capable Cherokee-speaking young men to set up the Cherokee type so that the printing of the language rendered immortal by Sequoyah may not become a lost art.

Eufaula Boarding School.—The superintendent, Mrs. Gertrude C. Melton, has made this school a most excellent institution in every detail. I recommend that the capacity of the school be increased so that it may accommodate 150 pupils, and that provision be made to maintain and chaperon at least 12 girls while they are making the high-school course in the Eufaula High School, which is near the Indian school and be reached over a cement walk. A little planning and a few additions would make room for the 150 pupils and the two or three additional employees who would be required for the increased number. It would be an easy matter to add a second story to the employees' new lodge and fit it up for housing the extras. Both the superintendent and Mr. Wyly, the supervisor, are heartily in accord with this recommendation. Needs: More land; a basement for vegetables, which would cost about \$300; new fire escapes, for which \$700 would suffice.

Euchee Boarding School.—The Euchee Tribe is distinct from the Creek Tribe but a constituent part of the Creek Nation, and many of the pupils of the Euchee School are of the Creek Tribe. I recommend that it be made an eight-grade school, and that provision be made for a stipulated number of children, who will remain at the school after the eighth grade and pursue the high-school course in the new city high school, which is being built just outside the Euchee School grounds. Supervisor Wyly concurs in this recommendation. Needs: A new storeroom should be built and the present storeroom so altered that it may serve to enlarge the laundry; an addition

should be made to the manual training shop; a teacher of agriculture is needed; several of the buildings are in a poor state of repair, and the necessary repairs, painting, screening, and overhauling of plumbing will require an outlay of approximately \$3,500.

The Nuyaka Boarding School is the cleanest, neatest boy school I have ever visited. The pupils are healthy, happy, bright, interested, and responsive and give evidence of efficient training and supervision. They reflect much credit on the young superintendent, a Cherokee, Mr. Jack Brown. This school should be made an eight-grade school. Needs: A lighting system is needed (the Delco system would cost about \$1,500); a dairy barn (a suitable one for this school could be put up for \$4,000); from 40 to 80 additional acres of land, as the school has only 40 acres; a motor truck—the long distance to railroad stations, 12 to 16 miles, makes this a necessity; because of the long distance from the railroad, there should be a resident doctor at the school, or at least a nurse.

I recommend, moreover, that the present salaries for the Nuyaka School be increased so as to correspond with the salaries paid in the other schools. All salaries in the Indian Service are lower than they should be, and I can not see why a discrimination should be made in this matter prejudicial to so excellent an institution as the Nuyaka School.

Mekusukey Academy is the sole remaining school for Seminole boys and girls, and I recommend that it be made an eight-grade school. Needs: A dairy and horse barn (the school barn burned and \$1,000 insurance was turned into the tribal fund; if it can be done, I suggest that this money be used toward putting up the new building; I also suggest that if \$3,000, class 4 money, deposited in bank, is available, it be used for the same purpose); a lighting system, for which \$1,200 probably would suffice; a fire escape for a new dormitory occupied by 20 girls; a modern laundry; a separate school building; an assistant farmer; an additional employee who might be termed a nurse-matron (a professional nurse is not desired for the reason that a nonprofessional nurse could be secured for a lower salary and could be detailed to other work); a motor truck.

Dr. W. S. Stevens recently has been detailed by the Indian Office for professional work among the Seminoles. He has been remarkably successful in the operations he has performed and in the cures he has effected, both as regards trachoma and other diseases. The Seminoles are much pleased and are loud in their praise of the doctor.

At Supervisor Wyly's suggestion, I recommend that Dr. Stevens be detailed from now until September for work, where it is most needed, among adult members of the Five Civilized Tribes, and after the opening of school in September that he be detailed to take up work in the schools; also that his itinerary be so arranged that he may at intervals follow up the work he has already done. He is convinced that follow-up visits would result in a great amount of good.

In recommending that *Mekusukey Academy* be made an eight-grade school, as it was originally, I call attention to the fact that when the seventh and eighth grades were abolished it was on the supposition that pupils, on the completion of the sixth grade, would continue their studies in Chilocco or other nonreservation Indian schools. The significant fact is, so the superintendent, Mr. Swengel,

states, that not one Seminole child has ever gone from Mekusukey to any other school. With the possible exception of the Cherokee Orphan Training School, this is quite generally the case as regards the pupils of the Five Tribe schools, and furnishes a very strong argument in favor of equipping all the Five Tribe schools with the eight grades, of making some of them high schools, and, where it is feasible, of utilizing others, such as Eufaula and Sapulpa, as homes for children who will pursue their studies in near-by high schools. The Choctaws and Chickasaw national schools all are equipped with eight grades and the children of these tribes have high-school opportunities in the contract schools at Durant, Tishomingo, Ardmore, Purcell, Chickasha, and Minco; and they are admitted to Chilocco and Haskell Institute and other nonreservation Indian schools. However, because of the fact that they should have every opportunity the Government can give them, and because as a rule when they complete the eighth grade in the national schools they almost invariably consider their education finished and quit school entirely, I recommend that one of the Choctaw male academies and one of the Choctaw female academies be made twelve-grade schools. This would give the Choctaw and Chickasaw children fairly good high-school opportunities.

The raising of the schools at Park Hill, Sapulpa, Nuyaka, and Mekusukey to eight-grade schools would prevent the going out of school after the completion of the sixth grade of so many Cherokee, Creek, Euchee, and Seminole children, while the providing of facilities for Indian children in the high schools of Eufaula and Sapulpa would materially enlarge the scope of opportunity for education for Creek and Euchee children.

I am particularly in favor, whenever it is possible, of Indian children, under proper supervision, attending high schools with the whites. This is an advantage enjoyed by Choctaw and Chickasaw children who are attending high school in the Choctaw and Chickasaw contract schools, and similar advantages would be offered Creek and Euchee children if the above recommendations in reference to the high schools of Eufaula and Sapulpa are carried out.

It can not be repeated too frequently that the majority of the children of the Five Tribes quit school after they have finished the grade (sixth or eighth, as the case may be) in their local tribal schools. As for the full bloods who seek further advantages, they, for the most part, go to nonreservation schools which at best are Indian colonies. The contact they get with the whites in these schools is effected by means of the "outing system," through which the boys and girls are hired out to work in white families. I protest against this system, because it does not afford proper contact with whites for Indian children and it has serious disadvantages, especially for girls. I do not understand how the outing system can be justified, and I wonder how those who hire out the children of Indian parents would feel if the United States Government would hire out their children to do menial or other work among any people, particularly the people of another race. The outing system is un-American and repellant, notwithstanding all the arguments, utilitarian and otherwise, urged in its favor.

It is true the Indian child should receive industrial training and should be taught and required to work, but this can be done in the school itself. It is unfortunate, however, that in the nonreservation

school, while the child can be taught to work, it can not enjoy proper contact with the whites. Nevertheless, for the present at least, the nonreservation school is necessary for a large number of Indian children, and so long as it is necessary it should offer full opportunity for academic and industrial training. On the other hand, while contact with the whites is necessary, it is a mistake to contend that the most effective way of civilizing the Indians is to put the Indian child, at an early age, into the public school along with the whites. This theory is being proved false in the Five Civilized Tribes, where large numbers of full-blood Indian children are now, nominally or in fact, attending the common schools of the State. The full-blood Indian child in the public school is usually at a serious disadvantage, which results largely from race antipathy, the Indian's inability to speak English, his irregular attendance at school, and his actual or imagined untidiness. Either the teacher will not give the requisite special attention to the Indian child that the child absolutely requires, or she can not do so if she would and at the same time do justice to her pupils generally.

The tribal schools that still survive among the Five Tribes are necessary and will be necessary for some years for the full-blood children, as it is in these schools, and in them alone, they can receive that special, patient attention and specific instruction which will enable them to acquire an adequate knowledge of the English language and habits of health and cleanliness; to be cured of diseases, such as trachoma, with which many are affected; to be taught to appreciate the advantage of an education and the necessity of striving for it. It is the tribal school that is best calculated to accomplish these things for the Indian child, who, after being thus equipped, after having made the eight grades of the tribal school, can successfully contend with and profitably associate with the white child, and not be an embarrassment to any teacher nor a detriment to any school. He can associate with the whites, with advantage, in the high school, where his contact with them will be profitable to him.

I further recommend that Congress make provision for higher education in white schools for higher learning, either of the State in which they live or in other States, for such children of the Five Tribes as have exhausted their local opportunities and have the desire and requisite talent to continue their studies. The Indians of the Five Tribes have been accustomed to opportunities of this sort, which explains the noticeable advancement many of them in the past have made. It is this fact in large measure that accounts for the leaders they have furnished not only their respective tribes but the new State of Oklahoma.

From the latest available report of A. S. Wyly, supervisor of schools, Five Civilized Tribes, I quote the following statistics:

Total number of children of school age of the Five Tribes.....	25, 612
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Total number of these children enrolled in the public schools of Oklahoma (in aid of which the Congress annually makes an appropriation, which is now being diminished year by year, and which for the fiscal year ending June 30, 1919, was \$250,000).....	18, 869
Enrolled in the tribal boarding schools.....	1, 347
Enrolled in the contract schools.....	585
Enrolled in nonreservation Indian schools.....	837
<hr/>	
Total	21, 638

which leaves approximately 4,000 children unaccounted for. On the liberal assumption that there may be 1,000 children in other schools of whom the supervisor has no record, it is safe to say that not less than 3,000 children are attending no school at all. If the tribal and contract schools were abolished this number would be increased approximately by 2,000, so that there would at least be 5,000 children out of school. It is scarcely reasonable to suppose that the State of Oklahoma can or will make adequate provision for these 5,000 children (mostly full bloods), and it *can not* make adequate provision for the *proper education* of this number of Indian children needing special care and training. I have this on the explicit statement of Mr. R. H. Wilson, State superintendent of public instruction. On the other hand, with all the educational facilities the Government has provided for the Indian children of all the tribes of the United States, there are at the present time, according to the official statistics of the Indian Office, as many as 22,972 Indian children for whom there are no educational facilities. According to the authority quoted, the capacity of the schools (including capacity in public schools) is 63,324, and the children enrolled in schools ("including those in public schools but not reported") is 63,476, so that eligible Indian children not in school number 22,972, or more than 25 per cent of a total school population of 90,555.

Hence it will be seen that it is necessary to continue the tribal schools of the Five Civilized Tribes for a number of years—I would suggest 10 years.

I shall not dwell on the unsatisfactory results as a rule, particularly as regards full bloods, realized by the attendance of the 18,869 Indian children in the common schools of eastern Oklahoma. While statistics indicate conditions are improving, the official reports show that many of these children do not attend school except for a few days during the term. I do not know how long Congress will be willing to continue its aid to the common schools of Oklahoma for the benefit of these Indian children, and I do not know how long it will be before adequate provision will have been made for the education of the 22,972 Indian children of the entire United States who at present have no school facilities. I do not know whether Congress will be willing to support the tribal schools of the Chickasaws, Choctaws, Creeks, and Seminoles, after these tribes shall have dissipated all their tribal moneys. As yet, these particular tribes have educational funds, but unless decided measures are taken at once these funds will soon be paid out per capita and passed over to the white man.

It would be a very easy matter for the Choctaws and Chickasaws to make ample provision for their schools for 10 years, and they would lose nothing by so doing, but rather would gain, because at the end of the 10-year period their funds would not all have been dissipated and there would be a considerable amount remaining to be divided out per capita, which the individual Indian of that day would be more than glad to receive.

I have spoken on this subject with a good many representative Choctaws and Chickasaws and all, without exception, have admitted the necessity for some such provision, while several have offered suggestions as to the methods by which this provision might be made.

I therefore recommend that Congress enact such legislation as will insure ample educational funds for the schools of the Choctaws and Chickasaws for a period of 10 years.

It will be far more difficult to conserve sufficient tribal funds for the schools of the Seminoles and the Creeks, and especially for the latter in view of the per capita payment authorized by the Indian act just passed, which leaves to the credit of the Creeks the small sum of \$150,000. Any further per capita payments to the Creeks and the Seminoles will completely eat up their tribal schools. These payments, as Hon. G. W. Grayson, principal chief of the Creek Tribe of Indians, remarked to me, amount to comparatively little to the individual Indian, who often spends his share within a few days after he receives it, while the total amount would mean a great deal to the children, as it would conserve to them for years to come their present educational facilities. The individual Indian seems to think only of himself and of the present moment, and clamors for the payment; but it is his white neighbor, particularly the merchant, who clamors louder still and who stimulates the Indian's desire to receive the payment because it is he who in a short time will have the Indian's payment in his own pocket. It is a pity that human beings, that the Indian children, should be sacrificed for the small momentary advantage that accrues to the adult Indian and white from these payments.

I earnestly recommend that Congress enact legislation to conserve the remaining tribal moneys of the Creeks and Seminoles as educational funds, and to increase them, if possible, by whatever odds and ends of tribal properties there may yet perchance remain to be disposed of and by whatever outstanding claims they may still have. For the Creeks, in particular, funds might possibly be secured by leasing some of the school properties at Sapulpa and at Nuyaka for oil purposes. The Sapulpa property lies directly in the oil belt.

At present the leasing of lands of the Creek Indians for oil purposes would be illegal because of the fact that section 41 of the Atoka Agreement, act of March 1, 1901 (31 Stat., 861), specifically provides that the provision in section 13 of the act of June 28, 1898 (30 Stat., 495), authorizing the Secretary of the Interior to make oil and gas leases among the Five Civilized Tribes "shall not apply to or in any manner affect the land or other property of said (Creek) tribe, or be in force in the Creek Nation." In view of this legislation, it is imperative, in order that additional funds be secured for the Creek schools, legislation should be enacted to amend section 41 of the act of March 1, 1901 so as to permit the Secretary of the Interior to make oil and gas leases on Creek lands, and I earnestly recommend such legislation.

It is a fact worthy of note that the schools supported by tribal moneys are more satisfactory to the Indians than those supported by United States funds for the reason, I presume, that in the management of these schools more attention is paid to the reasonable demands of the Indian people. This fact is impressed on one by comparing the one remaining school of the Cherokees with the schools of the Creeks, Choctaws, Chickasaws, and Seminoles; and it is a fact that should appeal with force to the Indian parent. Prominent Cherokees have admitted to me it was unfortunate that the Cherokees did not conserve an educational fund and that they gave up their academies which had accomplished so much in former years for the Cherokee people. The "white Cherokee" has been able to care for himself, but no one can see the full-blood Cherokee

children in the schools or visit the full-blood Cherokee Indians in their homes without noting the deterioration that is going on among them; without noting the ravages which disease, particularly tuberculosis, is making among them. The condition of many of the Cherokees of eastern Oklahoma is pathetic, and particularly so when we consider the history of the Cherokee people, the remarkable things many of their number have accomplished, the present high standing of the mixed-blood element, and the superior characteristics which have been accredited to this very remarkable tribe of Indians.

Only a few years ago the Cherokees would have scorned gratuity from the United States Government and they prided themselves on their superiority over the reservation Indians. To-day they are seeking admission into any kind of school on equal footing with the most nonprogressive tribe, and their one remaining educational institution is supported not by them, but by the United States Government. Let the other tribes heed the lesson!

I think it opportune to remark that for one who, like myself, has known these Indians when they were self-governing peoples, when the full blood was respected and courted because of his power to assert himself in tribal matters, it is with a sense of extreme regret one notes the falling spirits of the full blood and the loss of standing which even many mixed bloods are beginning to suffer in their respective communities. While the organic law of Oklahoma classes Indians as whites, conditions in the State demonstrate that race feeling can not be controlled by legislation.

I have had conferences with the governor of Oklahoma, Hon. J. B. A. Robertson; R. H. Wilson, State superintendent of public instruction; A. S. Wyly, supervisor of schools, Five Civilized Tribes; and Hon. G. W. Grayson, principal chief of the Creek Tribe of Indians, and find these gentlemen in accord with the recommendations herein set out.

Respectfully submitted,

WILLIAM H. KETCHAM,
Member, Board of Indian Commissioners.

APPENDIX R.

REPORT ON HEALTH CONDITIONS IN OKLAHOMA, BY WILLIAM H. KETCHAM.

June 16, 1919.

Hon. GEORGE VAUX, Jr.,

Chairman Board of Indian Commissioners.

SIR: On January 3, 1919, accompanied by Hon. William F. Semple, principal chief of the Choctaw Tribe of Indians, and Mr. Jules Schevitz, secretary of the Oklahoma Tuberculosis Association, I visited the Choctaw-Chickasaw Sanatorium, Talihina. I found everything in good order. Dr. Van Cleave, the superintendent, is devoted to his work and is doing the best he can under the circumstances and with the funds at his disposal. He told me that cottages are planned for the older patients. The building of these cottages would be decidedly a step forward. I have recommended them several times and I also have recommended that some Choctaw or Chickasaw Indian who speaks the language well be appointed as an official of some sort at the sanatorium. I know this must be done

sooner or later, because it is necessary if the sanatorium is to serve a useful purpose for the Choctaws and Chickasaws, and it is better that it should be done sooner than later. Despite Dr. Van Cleave's earnest efforts, the sanatorium is not popular with the Choctaws and Chickasaws. Some sort of campaign should be carried on in its behalf among the Indian people and the Indians must be made to feel that it is their institution and that they are duly represented in it officially. There should be several matrons working constantly among the Choctaw and Chickasaw people, making known the advantages of the sanatorium, and persuading those suffering from tuberculosis to avail themselves of these advantages.

In visiting the Choctaw and Chickasaw schools I discovered that the pamphlets on health that with no little labor and with considerable expense were translated into the Choctaw language and printed have not been sent to the schools as I understood was the intention of the Indian Office. It was thought it would be good for the schools to be made centers for the distribution of these pamphlets so they might reach the Choctaw-speaking people through the pupils. With the exception, however, of some of the contract schools, the school authorities knew nothing whatever about these health pamphlets. I can not discover that any one of the recommendations that have been made and reiterated in regard to a campaign of education among the Indians on the subject of tuberculosis has been carried out. This bespeaks neither earnestness nor systematic effort, both of which are necessary if the sanatorium is to be a success and if health conditions are to be improved among the Choctaws and Chickasaws.

Except for the excellent work that has been done recently among the Seminoles by Dr. W. S. Stevens of the Indian Service, the Oklahoma Tuberculosis Association seems to be the only agency at present that is trying to do anything for the health of the Indians of the Five Civilized Tribes. This association has made various suggestions and offers of cooperation to the United States Indian authorities, but it seems to have met with little or no response.

The survey that was made during the short-lived health drive did not take in more than one-half the Choctaw and Cherokee families, and the information obtained has quietly been laid away for what purpose is not evident. The Indian Office urges lack of funds as its reason for having interrupted the health drive and for not pushing health work among the Indians of the Five Civilized Tribes. It is evident that Congress should make an ample appropriation for this purpose.

It is extremely unpleasant to hear the conviction quite generally expressed that a great humanitarian movement such as the Oklahoma Indian health drive has not in fact been undertaken seriously nor for the motives announced.

I am annually reiterating recommendations in reference to health conditions prevailing among the Five Tribes and shall continue so to do. The Board of Indian Commissioners must maintain a clear record on this subject.

I also visited the Cherokee country in May, 1919, and am persuaded that a sanatorium for the treatment of tuberculosis should be built and maintained for the Cherokees. This is one of the things that a sense of humanity and justice must sooner or later force on the United States Government. I have discussed the question with the

governor of Oklahoma, and with the State commissioner of health, Dr. A. R. Lewis, and both are in accord with me on this subject. They are fully awake to the necessity of providing remedial health measures for the Indians of the State, and are ready at any moment to lend whatever assistance they can to whatever effort the Federal Government may make in this regard.

Respectfully submitted,

WILLIAM H. KETCHAM,
Member, Board of Indian Commissioners.

APPENDIX S.

REPORT ON LIQUOR SUPPRESSION OFFICE, INDIAN SERVICE, DENVER, COLO., BY WILLIAM H. KETCHAM.

OKLAHOMA CITY, OKLA., *January 1, 1919.*

SIR: On October 1, 1918, I visited the office of Mr. Henry L. Larson, chief special officer, liquor suppression, Indian Service, Denver, Colo. No department of the Indian Service is doing more beneficial and effective work than the liquor suppression under Mr. Larson, as I discovered in looking over the records of his office. The following items for the fiscal year 1918 will give some idea of the manner in which Mr. Larson and his deputies are doing their share for the betterment of conditions among the Indians:

Fines	151
Sentences (suspended)	41
Sentences to the penitentiary	52
Sentences to jail	749
Total convictions	993

Fines assessed against offenders, which include only part of confiscated wagons and automobiles, aggregated \$120,007.

The States in which the greatest number of arrests were made and convictions obtained were Oklahoma and Minnesota, with Oklahoma well in the lead, which does not make a good showing for the efficacy of its "bone-dry" law. It is a fact, however, that in 12 of the prohibition States there is a gradual, steady decrease in the violations of the liquor laws.

The seizure of liquor during the fiscal year 1918 totaled 36,564 gallons.

In these statistics no note is taken of cases pending nor of the many activities involved in the prosecution of the work. The scope of these activities may be inferred from the fact that 2,100 new cases were instituted and 1,522 were disposed of during the year.

I venture to suggest that few departments of the Government can make a better showing as to effective work.

I wish to commend in a special manner the efficient efforts recently initiated by this department on the Blackfeet Reservation, Mont., and on the Couer d' Alene Reservation, Idaho, for the ferreting out and the prosecuting of law breakers.

Respectfully submitted,

WILLIAM H. KETCHAM,
Member, Board of Indian Commissioners.

Hon. GEORGE VAUX, Jr.,
Chairman, Board of Indian Commissioners.

**REPORT OF THE SUPERINTENDENT FOR THE
FIVE CIVILIZED TRIBES**

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REPORT OF THE SUPERINTENDENT FOR THE FIVE CIVILIZED TRIBES OF OKLAHOMA.

DEPARTMENT OF THE INTERIOR,
UNITED STATES INDIAN SERVICE,
OFFICE OF SUPERINTENDENT, FIVE CIVILIZED TRIBES,
Muskogee, Okla., July 23, 1919.

SIR: There is transmitted herewith my annual report for the fiscal year ending June 30, 1919, accompanied by the annual reports of the supervisor of Indian schools for the Five Civilized Tribes and the mining trustees of the Choctaw and Chickasaw Nations.

INTRODUCTION.

Notwithstanding the interruption by war conditions and exigencies of the routine work incident to administering the tribal and individual affairs of the Five Civilized Tribes under laws and regulations in force, definite and substantial progress has been made during the fiscal year 1919. No additional legislation seems necessary to terminate Cherokee tribal affairs.

The coal and asphalt minerals in the Choctaw and Chickasaw Nations under the act of February 8, 1918, were offered for sale last December. There were 54 tracts, containing 42,103 acres, sold for \$1,363,645.17, leaving 463 tracts, containing 399,004 acres, appraised at \$13,198,901.56. Only 13,509 acres of tribal lands, 2,404 town lots, and 12 buildings remain to be sold. The coal and asphalt, and practically all remaining tribal property, except school buildings, will be reoffered for sale next fall. The last parcel of 10 acres of land in the Cherokee Nation is advertised to sell July 24, 1919.

Especial emphasis has been laid upon agriculture and stock raising, putting under cultivation additional acreage, building and equipping farm homes among the restricted Indians. They have responded even beyond expectations, and gratifying progress has been made. It is encouraging to know that many are finding themselves under the changed and more intensively competitive conditions, and by their efforts are maintaining themselves in greater comfort and convenience. One full-blood Indian, really primitive in his life, raised, killed, and properly cured 19 hogs, sufficient meat for his family for the year, and some to sell. He sent me a ham. I have never eaten a more delicious meat, not excepting the famous Virginia luxury. I take more pride and see far greater hope in such examples of individual effort and accomplishment, entirely unostentatious, than in the vast fortunes because of oil and gas. To my mind, when man is willing to get between the plow handles or to do the thing at hand cheerfully, he is safely on the road to success.

As farmers, knitters, nurses, soldiers, purchasers of war securities, and sacrificers for the common cause in the war, the Indians of the

Five Civilized Tribes did their full part. They measured up to duty and danger. None did more.

It is impossible to report in detail the innumerable responsibilities and necessary activities of this office, but a general outline follows.

LAND DIVISION.

All tribal land of the Five Civilized Tribes has been allotted or sold except 152,934 acres.

Table A shows the enrollment of the Five Civilized Tribes, corrected to date.

Table B shows the status of enrollment, allotment, and sale of unallotted land to June 30, 1919.

TABLE A.

Nation.	Restricted class.				Unrestricted class.			Grand total.
	Full bloods.	Mixed, three-fourths or more.	One-half to three-fourths.	Total.	Less than one-half, including intermarried whites.	Freed-men.	Total.	
Chickasaw.....	1,515	258	708	2,481	3,823	4,662	8,485	10,966
Choctaw.....	7,087	709	1,644	9,440	9,699	6,029	15,728	25,168
Mississippi Choctaw.....	1,367	90	30	1,477	183	.....	183	1,660
Cherokee.....	8,703	1,803	2,975	13,481	23,424	4,919	28,343	41,834
Creek.....	6,853	541	1,157	8,556	3,396	6,809	10,205	18,761
Seminole.....	1,254	133	245	1,732	409	986	1,395	3,127
Total.....	26,774	3,534	6,859	37,167	40,934	23,405	64,339	101,506

¹ This indicates the total number of citizens of the restricted class whose names appear on the approved roll. The approximate number of restricted citizens who have had the restrictions removed from their entire allotments by the Secretary of the Interior and by death is 14,731, leaving 22,436 restricted Indians June 30, 1919.

TABLE B.—Status of allotment and enrollment work and sale of unallotted lands on June 30, 1919.

Tribes.	Enrolled citizens entitled to allotment.	Restricted Indians June 30, 1919.	Average area of allotments. ¹	Area of homesteads. ¹	Area.	Reserved. ²	Allotted to June 30, 1919.	Unallotted. ³	
								Sold to June 30, 1919.	Area remaining unsold.
			<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Choctaw.....	26,828	6,076	320	180	6,953,048	68,203	4,291,036	2,587,817	5,993
Chickasaw....	10,966	1,452	320	160	4,707,903	37,448	3,800,190	870,255	10
Cherokee.....	41,824	7,875	110	40	4,430,088	22,880	4,346,223	50,965	10
Creek.....	18,761	5,756	160	40	3,079,095	16,016	2,997,114	65,645	320
Seminole.....	3,127	1,276	120	40	365,852	1,932	359,535	4,263	122
Total..	101,506	22,436	.....	.....	19,525,966	146,479	15,794,098	3,578,985	6,454

¹ Not including Choctaw and Chickasaw freedman whose allotments average 40 acres each, all of which is homestead.

² Reserved from allotments for town sites, railroad rights of way, coal and asphalt segregation, churches, schools, cemeteries, etc.

³ Including timberlands and segregated coal and asphalt lands.

⁴ This total does not include 187 acres contained in Roebuck Lake and 193 acres contained in Grassy Lake, Choctaw Nation, which were sold for \$330 and \$193.27, respectively.

⁵ This total does not include 22½ acres contained in Big Lake, which was sold for \$3,842.17, and an island in the Arkansas River containing 21.75 acres, which was sold for \$550.

CHOCTAW AND CHICKASAW NATIONS.

The total acreage of the Choctaw and Chickasaw Nations is 11,660,951 acres, of which 6,953,048 acres are contained in the Choctaw Nation and 4,707,903 acres in the Chickasaw Nation. There has been allotted in these two nations a total of 8,091,226 acres, leaving 3,569,725 acres of unallotted land of which 3,458,071 acres have been sold; 105,651 acres reserved for town sites, coal and asphalt segregation, and other purposes, and 6,003 acres remaining unsold.

During the year there were delivered 3 church and school deeds, 19 town-lot deeds, and 41 homestead and allotment deeds to Choctaw and Chickasaw citizens. There are 1,279 undelivered patents.

Estimated value of unsold tribal property.

Tribal schools and improvements.....	\$105, 000
2,280 town lots.....	45, 000
Unsold land, including timberland and surface of the segregated coal and asphalt land.....	60, 000
Amount uncollected from sale of coal and asphalt minerals.....	956, 479
Amount uncollected from lands sold.....	3, 348, 445
Coal and asphalt mineral deposits.....	13, 174, 795
Total.....	17, 689, 720

UNFINISHED BUSINESS.

Disposition of 6,003 acres of unallotted land, 4,545 acres reserved by coal and asphalt lessees and 29,638 acres of the surface of the segregated coal and asphalt land mining lessees have made application to purchase under the act of Congress of February 8, 1918, which applications are still pending with the department; also 399,004 acres of the coal and asphalt mineral deposits underlying the entire segregated coal and asphalt area; 5 acres including improvements reserved for the Choctaw council house; 824 acres including improvements reserved for 6 boarding schools; 2,280 vacant and forfeited town lots; collection of balance due on land sales, and sale of remaining coal and asphalt minerals, and preparing and delivering deeds thereto; disposition of all tracts of unallotted land that may be forfeited by reason of nonpayment of principal and interest, and delivery of 1,279 deeds.

CHEROKEE NATION.

This nation contains 4,420,068 acres of land of which 4,346,223 acres have been allotted, 50,955 acres sold, 22,880 acres reserved for town sites and other purposes, and 10 acres unsold. All the tribal lands and property of this nation have been disposed of excepting 10 acres of land in Ottawa County which has been offered for sale twice at public sale and once at private sale, and is advertised for sale July 24, 1919. There have been delivered during the year 28 patents, leaving undelivered 728.

UNFINISHED BUSINESS. .

Disposition of 10 acres of land and the completion of per capita payments, settlement of claims against the nation and delivery of 728 deeds.

Regulations governing the filing, determining, and settlement of all claims against the Cherokee Nation under the provisions of the act of Congress of May 25, 1918 (Public, No. 159, 65th Cong.), were approved by the Secretary of the Interior February 18, 1919, and notice that all such claims must be filed on or before May 25, 1919, as provided by said act, were published in one newspaper of general circulation published at the county seat of each county in said nation, and printed posters giving similar notice were posted in the post offices and other conspicuous places in said nation; thus all persons having claims against said nation were given ample time and opportunity to file same before May 25, 1919. No claims have been filed at this office, except a few claims for per capita payments. All other claims were filed with the Commissioner of Indian Affairs.

CREEK NATION.

This nation contains 3,079,095 acres, of which 16,016 acres were reserved for town sites and other purposes; 2,997,114 acres allotted to its members: 65,645 acres sold and 320 acres unsold.

Unsold tribal property and estimated value.

124 town lots, Muskogee, Tulsa, and Lee.....	\$100,000
3 boarding schools, Nuyaka, Eufaula, and Sapulpa.....	69,000
Unsold land.....	3,200
Total.....	172,200

UNFINISHED BUSINESS.

Disposition of 320 acres of unallotted land in litigation, remaining tribal property, completion of equalization of allotments, investigation of alleged duplicate and fraudulent enrollments, determination of suits to recover valuable oil and gas lands, and the delivery of 590 deeds.

SEMINOLE NATION.

This nation contains 365,852 acres of land, of which 359,535 acres have been allotted; 1,932 acres reserved; 4,263 acres sold, and 122 acres unsold.

Unsold tribal property and estimated value.

Emahaka Mission School, 320 acres.....	\$15,000
Mekusukey Academy, 320 acres.....	22,400
Unsold.....	1,500
Total.....	38,900

The Emahaka School has been abandoned and litigation affecting the ownership of the school building determined. This property has been appraised and will be sold at an early date.

UNFINISHED BUSINESS.

Disposition of 122 acres unallotted land, 120 acres of which being in litigation, remaining tribal property, distribution of tribal funds to members of the tribe, and delivery of 400 deeds to allottees.

AUCTION SALE OF UNALLOTTED TIMBER AND SURFACE OF THE SEGREGATED COAL AND ASPHALT LANDS.

The first sale of unallotted land in the Five Tribes was held on November 21, 1910. Since then, there have been sold 43,211 tracts containing 3,578,935 acres for \$20,376,096.27 being \$4,536,108.67 more than the appraised value, and averaging \$5.69 per acre.

During the year, there has been held one auction sale of unallotted land in the Choctaw, Chickasaw, and Creek Nations. From October 9 to October 17, 1918, there were offered in the Choctaw and Chickasaw Nations 187 tracts of the surface of the segregated coal and asphalt lands suitable for town-site purposes containing 878 acres of which, 164 tracts containing 796 acres were sold for \$21,172.73; 61 tracts of the surface of the segregated coal and asphalt lands classified as agricultural and grazing containing 5,702 acres of which 59 tracts containing 5,616 acres were sold for \$61,612.85; 61 tracts of timberland containing 8,159 acres, of which 20 tracts containing 2,324 acres were sold for \$18,802.32, and 6 tracts of unallotted land containing 340 acres, all of which were sold for \$7,047.37; also 1 tract of unallotted land in the Creek Nation containing 32.50 acres, which was sold for \$365.63.

Immediately following are tables C, D, E, F, G, and H, showing status of sale of tribal lands in the Five Civilized Tribes.

TABLE C.—*Sale of unallotted land without minimum price, Choctaw and Chickasaw Nations.*

[Regulations of July 18, 1918.]

County.	Land offered.		Land sold.				Land unsold.	
	Number of tracts.	Area in acres.	Number of tracts.	Area in acres.	Sale price.	Average sale price per acre.	Number of tracts.	Area in acres.
Grady.....	2	140.00	2	140.00	\$562.50	\$4.00	None.	None.
Murray.....	1	10.00	1	10.00	105.00	10.50	None.	None.
Garvin.....	1	10.00	1	10.00	210.00	21.00	None.	None.
Coal.....	2	180.00	2	180.00	6,170.00	34.27	None.	None.
CREEK NATION.								
Hughes.....	1	32.50	1	32.50	365.63	11.22	None.	None.
Total.....	7	372.50	7	372.50	7,413.13	19.90	None.	None.

TABLE D.—*Segregated coal and asphalt lands, Choctaw and Chickasaw Nations (agricultural and grazing).*

[Regulations of July 18, 1918.]

County.	Land offered.		Land sold.						Land unsold.	
	Number of tracts.	Area in acres.	Number of tracts.	Area in acres.	Sale price.	Appraisal, land and improvements.	Average appraisal, land and improvements per acre.	Average sale price per acre.	Number of tracts.	Area in acres.
Le Flore.....	2	165.79	1	160.00	\$980.00	\$980.00	\$6.00	\$6.00	1	5.79
Haskell.....	57	5,415.57	56	5,335.57	60,200.98	60,950.78	11.42	11.28	1	80.00
Pittsburg.....	1	16.50	1	16.50	88.63	66.00	4.00	6.25	None.	None.
Latimer.....	1	104.36	1	104.36	365.28	782.80	7.50	3.50	None.	None.
Total.....	61	5,702.22	59	5,616.43	61,612.85	62,759.58	11.17	10.99	2	85.79

TABLE E.—*Sale of segregated coal and asphalt lands, Choctaw Nation (townsite additions).*

[Regulations of July 18, 1918.]

County.	Land offered.		Land sold.						Land unsold.	
	Number of lots.	Area in acres.	Number of lots.	Area in acres.	Sale price.	Appraise-ment.	Average appraise-ment per acre.	Average sale price per acre.	Number of lots.	Area in acres.
Pushmataha.....	16	36.88	6	11.47	\$160.00	\$250.00	\$21.79	\$13.94	10	25.41
Le Flore.....	11	30.66	6	24.02	446.00	440.00	18.31	18.56	5	6.64
Haskell.....	3	6.46	3	6.46	111.19	130.00	20.12	17.21	None.	None.
Pittsburg.....	116	586.29	108	586.29	14,441.14	6,415.00	11.96	26.95	8	90.09
Latimer.....	17	98.87	17	98.87	2,970.00	2,110.00	22.48	31.63	None.	None.
Coal.....	24	124.38	24	124.38	3,044.40	2,844.60	22.87	24.47	None.	None.
Total.....	187	878.54	164	796.40	21,172.73	12,189.60	15.30	26.53	23	82.14

TABLE F.—*Sale of timber lands, Choctaw Nation.*

[Regulations of July 18, 1918.]

County.	Land offered.		Land sold.						Land unsold.	
	Number of tracts.	Area in acres.	Number of tracts.	Area in acres.	Sale price.	Minimum price.	Average sale price per acre.	Average minimum price per acre.	Number of tracts.	Area in acres.
McCurtain.....	3	235.21	None.	None.	.....	.....	.....	.....	3	235.21
Pushmataha.....	42	5,590.78	12	1,290.00	\$13,610.00	\$13,492.50	\$10.63	\$10.54	30	4,319.78
Le Flore.....	12	1,754.72	5	634.88	3,154.52	2,879.82	4.98	4.53	7	1,119.84
Latimer.....	1	570.00	3	410.00	2,037.50	992.00	4.97	2.41	1	160.00
Total.....	61	8,159.71	20	2,324.88	18,802.32	17,364.32	8.08	7.46	41	5,834.83

TABLE G.—*Recapitulation—1918 sale.*

Class of land.	Land offered.		Land sold.					Land unsold.		
	Number of tracts.	Area in acres.	Number of tracts.	Area in acres.	Sale price.	Appraisalment.	Average appraisalment per acre.	Number of tracts.	Area in acres.	
Segregated:										
Townsite.....	187	878.54	164	706.40	\$21,172.73	\$12,189.60	\$15.30	23	82.14	
.....	61	5,702.22	59	5,616.43	61,612.85	62,759.63	11.42	2	85.79	
Agricultural and grazing.....	61	8,159.71	20	2,324.88	18,802.32	17,364.32	7.46	41	5,834.83	
.....	7	372.50	7	372.50	7,413.13	1,796.63	4.80	None.	1	None.
Unallocated.....										
Total.....	316	15,112.97	250	9,110.21	109,001.03	94,108.13	10.32	66	6,002.76	

1 There are 320 acres in the Creek Nation involved in suit, and 10 acres of unoffered land in the Cherokee Nation not included in this table.

TABLE H.—*Status of unallotted land sold in the Choctaw, Chickasaw, Cherokee, Creek, and Seminole Nations, from Nov. 21, 1910, to Oct. 17, 1918, including timber lands in the Choctaw Nation, and segregated coal and asphalt lands in the Choctaw and Chickasaw Nations.*

Date of sale.	Nation.	Land offered.			Land sold.					Lands unsold.		
		Num-ber of tracts.	Area.	Min-dum price.	Num-ber of tracts.	Area.	Sale price.	Appraisal-ment of land sold.	Average apprais-ement per acre.	Aver-age sale price.	Remain-ing tracts unsold.	Area remaining unsold.
Dec. 1, 1910, to Oct. 16, 1918, In-clusive.	Choctaw and Chickasaw.	38,980	3,464,074	\$15,567,891.39	38,894	3,458,071.38	\$19,775,436.08	\$15,471,068.26	\$4.47	\$5.37	66	6,002.62
Nov. 21, 1910, to May 27, 1916.	Cherokee.	2,890	80,965	250,288.90	2,859	80,965.00	178,007.19	124,746.28	2.45	3.49	1	10.00
Nov. 21, 1910, to Oct. 17, 1918.	Creek.	1,431	65,965	225,085.18	1,429	65,645.00	389,211.62	224,008.00	3.41	5.82	2	320.00
Nov. 21, 1910, to June 28, 1913.	Seminole.	62	4,386	20,105.06	59	4,263.00	40,441.37	20,105.06	4.76	9.57	3	122.00
Grand total of Five Nations.		43,283	3,586,399	16,068,320.53	43,211	3,578,024.38	20,376,064.27	16,899,987.60	3.77	6.06	72	6,454.62

¹ This total does not include 167 acres contained in Roebuck Lake and 193 acres contained in Grassy Lake, Choctaw Nation, which were sold for \$320 and \$193.27, respectively.

² This total does not include 228 acres contained in Big Lake, which was sold for \$3,842.17, and an island in the Arkansas River containing 24.75 acres which was sold for \$650.

³ This total represents land involved in suit in the United States court and 2 acres of abandoned school reservation.

There have been sold to date 3,458,071 acres of unallotted land in the Choctaw and Chickasaw Nations for \$19,775,436.08; 50,955 acres in the Cherokee Nation for \$178,007.19; 65,645 acres in the Creek Nation for \$382,211.63; 4,263 acres in the Seminole Nation for \$40,441.37, making a total of 3,578,934.38 acres sold for a total of \$20,376,096.27 to June 30, 1919.

Proper record of payment of principal and interest has been made, necessitating 34,000 entries and preparing and mailing 30,000 receipts and notices.

The following shows the payments of principal and interest:

Principal.....	\$1, 241, 932. 95
Interest.....	202, 781. 74
Total.....	1, 444, 714. 69

Statement of patents prepared for purchasers of unallotted lands in the Five Civilized Tribes.

Nation.	Previously reported.	1919	Total.
Choctaw and Chickasaw.....	21, 456	4, 287	25, 743
Cherokee.....	1, 518	3	1, 521
Creek.....	972	3	975
Seminole.....	31	2	33
Total.....	23, 977	4, 295	28, 272

SALE OF MISCELLANEOUS TRIBAL LAND.

By departmental authority of June 24, 1919, the offer of the city of Okmulgee, Creek Nation, Okla., to purchase the Creek National Council Building and block of land on which same is located in said city for \$100,000, the appraised value thereof, was accepted.

Under the provisions of section 18 of the Indian appropriation act, approved May 25, 1918 (Public, No. 159, 65th Cong.), 11,699.52 acres of land in McCurtain County were purchased by the State of Oklahoma for a game preserve for \$71,718.05. Full payment has been made therefor and deed covering same issued.

By departmental authority of October 22, 1918, and June 12, 1919, one tract of land in Nowata County, Cherokee Nation, containing 20 acres was sold for \$262, and one tract of land containing 111.11 acres located in Muskogee County, Cherokee Nation, was sold for \$555.55. Ten small tracts of land in the Choctaw and Chickasaw Nations heretofore reserved from allotment and sale for railroad right of way purposes and abandoned, containing a total of 55.17 acres, were sold for \$705.70, or an average of \$12.79 per acre.

APPRAISEMENT OF COAL AND ASPHALT MINERAL DEPOSITS IN THE CHOCTAW AND CHICKASAW NATIONS, UNDER THE ACT OF CONGRESS OF FEB. 8, 1918 (PUBLIC, NO. 98, 65TH CONGRESS).

Under the provisions of said act of Congress, Gabe E. Parker, Superintendent for the Five Civilized Tribes; J. George Wright, Superintendent of the Osage Agency; and Dr. J. J. Rutledge, of the United States Bureau of Mines, were appointed to appraise the coal

and asphalt mineral deposits in the Choctaw and Chickasaw Nations. The appraisements were approved August 28, 1918, by the Secretary of the Interior.

The following statement shows the appraisement by districts of the leased and unleased coal and asphalt deposits in the Choctaw and Chickasaw Nations.

Coal deposits.

District.	Acreage.	Appraisement.
Unleased tracts:		
McAlester.....	60,483.20	\$1,494,882.30
Wilburton.....	44,354.10	1,476,223.10
Stigler.....	25,392.45	981,744.35
Howe-Poteau.....	64,615.45	2,087,002.48
McCurtaIn-Massey.....	78,736.71	2,850,796.95
Lehigh-Ardmore.....	53,734.49	1,434,234.75
Total.....	327,316.40	10,324,883.93
Leased tracts:		
McAlester.....	54,347.49	1,708,414.79
Wilburton.....	10,871.35	781,527.19
Stigler.....	None.	None.
Howe-Poteau.....	10,587.23	366,219.95
McCurtaIn-Massey.....	11,602.58	532,882.82
Lehigh-Ardmore.....	21,542.09	747,112.06
Total.....	108,950.74	4,136,156.80
Grand total.....	436,267.14	14,461,040.73

Asphalt deposits.

District.	Acreage.	Appraisement.
Unleased tracts: Choctaw Nation.....	960	\$9,600.00
Leased tracts: Chickasaw Nation.....	3,880	67,800.00
Total.....	4,840	77,400.00

Recapitulation.

	Acreage.	Appraisement.
Unleased tracts, coal.....	327,316.40	\$10,324,883.93
Leased tracts, coal.....	108,950.74	4,136,156.80
Unleased tracts, asphalt.....	960.00	9,600.00
Leased tracts, asphalt.....	3,880.00	67,800.00
Grand total.....	441,107.14	14,538,440.73

SALE OF COAL AND ASPHALT MINERAL DEPOSITS IN THE CHOCTAW AND CHICKASAW NATIONS.

On September 24, 1918, the Secretary of the Interior approved regulations to govern the sale of the coal and asphalt deposits in the segregated mineral area in the Choctaw and Chickasaw Nations, Okla., under the provisions of the act of Congress of February 8, 1918, and directed that such coal and asphalt deposits be offered for sale at public auction to the highest bidder at McAlester, Okla., December 11, 12, 13, and 14, 1918. In accordance therewith descriptive lists, circulars, posters, and maps were prepared for general distribution

to prospective bidders. The sale was widely advertised in numerous newspapers published throughout the country, and posters, circulars, and descriptive lists were mailed to persons interested in the sale. Railroads operating in Oklahoma cooperated with the department in advertising the sale.

The sale was held at McAlester on the dates mentioned. The attendance was small, and very little interest was taken therein except by coal and asphalt lessees; only two or three persons outside of Oklahoma were present, and only six tracts were purchased by companies or individuals not interested as lessees of said coal and asphalt deposits. There were offered 517 tracts containing 441,107.14 acres, of which 54 tracts containing 42,103 acres were sold for \$1,363,645.17. All of the purchasers made the required 20 per cent payment on the date of the sale except the purchaser of one unleased tract which was sold for \$21 and paid for in full. The total amount collected at the sale as the 20 per cent payment was \$272,741.82.

Of the 54 tracts sold, 37 are leased coal tracts containing 32,222.49 acres and were sold to the lessees for \$1,078,543.62; 1 tract of leased asphalt mineral containing 960 acres was sold to the lessee for \$14,400, and 16 unleased coal tracts containing 8,921 acres were sold for \$270,641.25, being \$24,109 more than the appraisement. The average minimum price per acre of the unleased tracts sold is \$27.63, and the average sale price obtained therefor at the sale is \$30.33. All of the leased tracts and 9 of the unleased tracts were sold at the appraised value.

Statement showing purchasers of coal and asphalt deposits, total acreage purchased, average price per acre, and excess over average minimum price per acre received.

LEASED COAL AND ASPHALT.

Purchaser.	Total acreage.	Average price paid per acre.	Excess over average minimum price per acre.
Choctaw, Oklahoma & Gulf R. R. Co.....	17,782.98	\$28.67	None.
J. E. Layden and Owen McHugh.....	40	40.00	None.
Gaines Creek Coal Co.....	160	56.00	None.
Central Coal and Lumber Co.....	1,920	42.50	None.
Pierce Coal Co.....	40	40.00	None.
Kali-Inia Coal Co.....	630	34.00	None.
Edward S. Rea, trustee.....	1,436.54	58.00	None.
Keystone Coal & Mining Co.....	340	47.00	None.
Folsom-Morris Coal Co.....	9,872.97	35.75	None.
Whitaker Brodnax (asphalt).....	960	15.00	None.

UNLEASED COAL AND ASPHALT.

Choctaw, Oklahoma & Gulf R. R. Co.....	330	\$49.09	\$9.09
C. E. Kimball.....	1,845.27	25.00	2.50
Milby-Dow Coal & Mining Co.....	2,401.10	29.30	3.57
W. F. Mullen.....	482	15.00	None.
Southern Fuel Co.....	780	30.00	None.
Adamson Coal Co.....	1,660.78	28.88	6.64
R. H. Halligan.....	460.90	1.00	None.
G. L. Blackford.....	960	60.00	None.
Peter Harris.....	40	102.00	62.00
D. D. Bronson and M. R. H. Taylor.....	40	45.00	None.
D. E. Nettleblade.....	20	1.05	.06

APPRAISEMENT OF LAND AND IMPROVEMENTS ON THE SEGREGATED COAL AND ASPHALT LANDS IN THE CHOCTAW AND CHICKASAW NATIONS RESERVED FOR MINING PURPOSES.

Under the act of Congress approved February 8, 1918, providing for the sale of the coal and asphalt deposits in the segregated mineral land in the Choctaw and Chickasaw Nations, Okla., coal and asphalt lessees were given the preferential right; provided the same should be exercised within 90 days after the approval of the completion of the appraisement of the minerals as therein provided; to purchase at the appraised value any or all of the surface of the lands lying within the leases held by them and heretofore reserved by order of the Secretary.

When the surface of the land was appraised under the act of February 19, 1912, all improvements located thereon belonging to private individuals were appraised, but no appraisement was made of improvements belonging to mining companies. Practically all of the land thus appraised excepting land reserved for mining companies has heretofore been sold at a large increase over the appraisement. The leases made with the mining companies provide that improvements erected thereon by them, except engines, tools, and machinery, shall revert to the owners upon the termination of the lease.

While the act of Congress above referred to gives the coal companies the preferential right to purchase any or all of the reserved land within their leases at the appraisement, it was not considered that it was intended to give them the preferential right to purchase such lands at the 1912 appraisement.

The land, having enhanced materially in value since the 1912 appraisement, it was deemed unjust to the Choctaw and Chickasaw citizens to permit mining companies to purchase the surface of the land at the old appraisement, and steps were taken to have same reappraised.

By departmental authority of August 29, 1918, three appraisers were appointed to appraise the surface of the land held by coal and asphalt lessees for mining purposes, and to appraise the equity of the Choctaw and Chickasaw Tribes in the buildings and improvements erected thereon by mining lessees, and improvements located thereon belonging to private individuals erected prior to February 19, 1912. The appraisers completed their work on October 31, 1918, and on November 7, 1918, their report, accompanied with schedules of appraisement of said lands and improvements, were submitted to the department.

APPLICATIONS OF LESSEES TO PURCHASE THE SURFACE OF THE SEGREGATED COAL AND ASPHALT LANDS IN THE CHOCTAW AND CHICKASAW NATIONS RESERVED FOR MINING COMPANIES.

On November 20, 1918, this office was authorized by telegram from the department, to sell the surface of the segregated coal and asphalt lands theretofore set aside for the use of the mineral lessees at the appraised value as made under the act of February 19, 1912. Coal lessees were immediately notified thereof by telegram. In accordance therewith, practically all of such lessees made application to purchase the 29,637 acres of the surface reserved by them for mining purposes

under the 1912 appraisalment. On November 26, 1918, the Secretary of the Interior advised this office by wire, as follows:

Have approved this day equity of Choctaw and Chickasaw Tribes in improvements erected on the surface of the segregated coal land area Choctaw Nation, which shall be the true value thereof on sale of surface to mining lessees on terms as provided in section 2 of the act of February 8, 1918.

Said lessees were immediately notified of the approval of the appraisalment of the equity of the tribes in said improvements and requested to remit the necessary additional amount required to cover same. Some of the lessees protested against paying for improvements erected by them, and several paid the additional amount required under protest.

Applications were made by 44 coal and asphalt lessees operating 104 leases to purchase 29,637.81 acres for \$358,358.81 for the land, and \$62,976 for the improvements.

RECORDING OF DEEDS AND OTHER INSTRUMENTS.

The following statement shows the progress of recording deeds and other instruments during the year ended June 30, 1919:

Creek homestead and allotment deeds.....	2
Cherokees homestead and allotment deeds.....	2
Choctaw-Chickasaw homestead and allotment deeds.....	4
Seminole homestead and allotment deeds.....	2
Church and school deeds.....	3
Cemetery deeds.....	2
Unallotted land deeds, Choctaw-Chickasaw.....	4,499
Miscellaneous deeds.....	4
Total.....	4,518

RENTAL OF THE SURFACE OF THE SEGREGATED COAL AND ASPHALT LANDS.

During the year, there has been collected as rental from occupants of the unsold surface of the segregated coal and asphalt lands, \$1,297.50. As practically all of the surface of the segregated coal and asphalt lands not reserved for mining purposes has been sold, and mining companies have made application to purchase the surface of the lands reserved by them for mining purposes, which applications have not been approved, no special effort has been made to collect rentals from occupants thereof. As soon, however, as these applications are acted upon, so that it can be determined what portion of this land is subject to rental by the Choctaw and Chickasaw Nations, special efforts will be made to collect rental from persons found to be using any of the unsold land during the year 1919.

TOWN SITES.

There has been received \$693.25 in payment for town lots in the Choctaw and Chickasaw Nations and \$3,205.25 in settlement for certain lots in Muskogee, Creek Nation, which were involved in suit, making the total amount received during the year \$3,898.50. Twenty-three final payments were made for town lots in the Choctaw and

Chickasaw Nations, including five town lots in Tuttle, Chickasaw Nation, involved in the compromise settlement with E. Dowden and others, and deeds thereto have been issued to the purchasers.

Towns surveyed and platted.

Nations.	Number of towns.	Acreage.
Creek.....	26	10,699.10
Cherokee.....	54	9,531.47
Choctaw.....	98	21,118.77
Chickasaw.....	130	23,797.83
Seminole.....	1	635.00
Total.....	309	65,772.16

The following statement shows the amounts received to June 30, 1919, as payment on town lots:

When received.	Creek.	Cherokee.	Choctaw and Chickasaw.	Total.
Prior to July 1, 1918.....	\$738,642.10	\$773,297.40	\$3,031,094.74	\$4,543,034.24
Fiscal year, 1919.....	3,205.25		693.25	3,898.50
Total.....	741,847.35	773,297.40	3,031,787.99	4,546,932.74

Unsold town lots.

Choctaw Nation:	
Vacant lots.....	1,448
Forfeited town lots.....	45
Reserved for coal lessees.....	787
Creek Nation:	
Forfeited town lots.....	7
Lots recovered by suit.....	117
Total.....	2,404

Several suits are still pending in the United States District Court to recover lots in the Creek Nation alleged to have been fraudulently scheduled.

CERTIFIED COPIES.

There have been prepared 18,132 certified copies of the records on file in this division for which was received \$20,696.65.

ILLEGAL CONVEYANCES OF ALLOTTED LAND.

Under the provisions of the act of Congress approved May 27, 1908 (32 Stat., 312), there have been instituted heretofore in the United States District Court for the Eastern District of Oklahoma, 27,517 suits to clear the title of alleged illegal conveyances of allotted Indian land. Of all the suits thus instituted, 24,571 had been disposed of prior to July 1, 1918. During the year 2,010 additional suits were disposed of, leaving 936 still pending.

TRIBAL RECORDS.

Section 13 of the act of Congress approved May 27, 1908, (35 Stat., 312), provides that all tribal records of the Five Civilized Tribes shall be placed in the custody or control of the Secretary of the Interior. The Superintendent for the Five Civilized Tribes was designated as custodian of these records by the Secretary and same are on file in his office at Muskogee, Okla. These records are not only valuable from a historical standpoint, but to the general public who desire to examine same and obtain certified copies thereof. Only a few indexes were made thereof and the papers and files are not numbered. It is, therefore, very difficult to locate same.

The Oklahoma State Historical Society is seeking to become custodian of these records, but the separation of such as are not required for public legal use from those which are indispensable will require much time and work and entail considerable expense. I, therefore, renew my recommendation that Congress be asked to appropriate a sufficient sum to be used in employing the necessary clerical force to assemble them under appropriate heads, prepare indexes thereof, pay for binding such of the records as may be required and to purchase the necessary file cases, index books, and stationery.

TRIBAL GOVERNMENTS AND ATTORNEYS.

During the fiscal year ended June 30, 1919, tribal warrants were drawn as shown below for salaries and expenses of tribal officers, attorneys, and other expenses of the tribal governments of the Creek, Choctaw, and Chickasaw Nations.

Warrants issued during the fiscal year ended June 30, 1919.

	Total paid.
Creek Nation.....	\$12,828.32
Choctaw Nation.....	17,281.80
Chickasaw Nation.....	17,069.15

Tribal officials and attorneys for the Five Civilized Tribes were paid from tribal funds authorized by Congress as follows:

TRIBAL OFFICERS OF CREEK NATION.

Name.	Title.	Address.	Salary per annum.
G. W. Grayson.....	Principal chief.....	Enfauia, Okla.....	\$2,000
James C. Davis.....	Tribal attorney.....	Muskogee, Okla.....	5,000
Eula J. Branson.....	Tribal secretary.....	do.....	1,500

TRIBAL OFFICERS OF CHOCTAW NATION.

William F. Semple.....	Principal chief.....	Durant, Okla.....	\$2,000
Bessie Francisco.....	Tribal secretary.....	do.....	1,000
William R. McIntosh.....	Mining trustee.....	McAlester, Okla.....	4,000
Walter J. Turnbull.....	Tribal attorney.....	Durant, Okla.....	5,000
Leela M. Adams.....	Stenographer.....	do.....	1,200

TRIBAL OFFICERS OF CHICKASAW NATION.

Douglas H. Johnston.....	Governor.....	Emet, Okla.....	\$3,000
Ludie Johnston.....	Tribal secretary.....	Milburn, Okla.....	1,000
Eastman Johnson.....	Tribal interpreter.....	Tishomingo, Okla.....	300
J. Hamp Willis.....	Mining trustee.....	Kingston, Okla.....	4,000
Relford Bond.....	Tribal attorney.....	Chickasha, Okla.....	5,000

The tribal officers of all nations are allowed their traveling and necessary expenses when away from home while on official business, except the mining trustees of the Choctaw and Chickasaw Nations.

The Cherokee and Seminole Nations had no tribal attorneys for the fiscal year 1919, and all legal matters affecting restricted Indians and other citizens of those nations were attended to by the United States probate attorneys.

CREEK ENROLLMENT CARDS.

The names of 18,761 enrolled citizens and freedmen of the Creek Nation are listed on 9,016 census cards, practically all of which were made in 1899, 1900, 1901, and 1902, except the cards of new borns and minors enrolled under the acts of Congress of March 3, 1905, and April 26, 1906. These cards show the names and roll numbers of the enrollees, their ages and degree of blood, the names of their parents, and the names of the tribal towns to which they belong, and are very valuable for identification purposes. Duplicates were made of the Choctaw, Chickasaw, Cherokee, and Seminole census cards, but none were made of the Creek cards. All of the Creek census cards have been in constant use for from 12 to 20 years, and as a result thereof, many of them are almost illegible. It is important that these cards be preserved and it is, therefore, recommended that Congress be requested to appropriate \$5,000 for such purpose, to be used in making duplicates thereof, and binding same in book form.

FIELD DIVISION.

More than half the employees of this superintendency are located in the field at places away from Muskogee, as field clerks, assistants, probate attorneys, farmers, and Indian police. The 40 counties in eastern Oklahoma are divided into the following field districts:

District No.	Location of field office.	Counties.
1.....	Claremore.....	Rogers, Nowata, Craig, and Mayes west of Grand River.
2.....	Locust Grove.....	Delaware and Mayes east of Grand River and Ottawa west of Grand River.
3.....	Sapulpa.....	Creek, Tulsa, Washington.
4.....	Oklmulgee.....	Oklmulgee, Okfuskee.
5.....	Muskogee.....	Muskogee west of Arkansas River, Wagoner and McIntosh.
6.....	Tahlequah.....	Cherokee, Muskogee east of Arkansas River.
7.....	Sallisaw.....	Adair, Sequoyah.
8.....	Poteau.....	LeFlore, Haskell.
9.....	McAlester.....	Latimer, Pittsburg.
10.....	Holdenville.....	Hughes.
11.....	Atoka.....	Pontotoc, Coal, Atoka.
12.....	Paris Valley.....	McClain, Garvin, Murray.
13.....	Chickasha.....	Grady, Stephens, Jefferson.
14.....	Ardmore.....	Carter, Love, Marshall.
15.....	Durant.....	Johnston, Bryan.
16.....	Hugo.....	Choctaw, Pushmataha.
17.....	Idabel.....	McCartain.
18.....	Wewoka.....	Seminole.

Indians of the Five Civilized Tribes continued to display the true spirit of Americanism. They have not hesitated to perform their full duty as citizens and patriots. They have cooperated earnestly in every worthy enterprise to promote community, State, and national interests and have contributed their full share to the winning

of the World War. From restricted funds alone, they bought \$10,264,000 Liberty and Victory bonds and \$832,769.20 war savings stamps. It is estimated that more than 4,000 entered the military and naval service and that over 200 made the supreme sacrifice. Instances of the greatest heroism have been numerous and many distinctions won by them.

The following are a few of the many instances coming to my knowledge illustrative of the heroic qualities displayed by Indian soldiers of the Five Tribes:

Raymond Ross, a Cherokee, joined the marines when only 17 years of age; was wounded a number of times, and for heroic conduct at Chateau Thierry wears the cord of the Legion of Honor.

Serpt. Alfred G. Bailey, also a Cherokee, while in action near Moulins, France, on July 15, 1918, killed two German machine gunners and captured another and his gun, for which he was awarded the distinguished-service cross, and a few days later was himself killed in battle.

Lieut. Bland Breeding, a Creek, and his little command, surrounded by an overwhelming number of the enemy, gave a remarkable account of themselves and died, fighting, to the last man.

James Green, full-blood Creek, made a brilliant record for heroic service, winning several decorations.

Pvt. Joseph Oklahombi and Corpl. Nicholas E. Brown, both full-blood Choctaws, were awarded the French *croix de guerre*. The citation issued to Pvt. Oklahombi under order of the marshal, commander in chief of the French Armies of the East, Petain, is as follows: "Under a violent barrage, dashed to the attack of an enemy position, covering about 210 yards through barbed-wire entanglements. He rushed on machine-gun nests, capturing 171 prisoners. He stormed a strongly held position containing more than 50 machine guns and a number of trench mortars. Turned the captured guns on the enemy and held the said position for four days, in spite of a constant barrage of large projectiles and of gas shells. Crossed 'No man's land' many times to get information concerning the enemy and to assist his wounded comrades."

Corpl. Brown was killed in battle.

Odus Leader, another Choctaw, was wounded several times, cited for bravery, and selected by the French Government as the model original American soldier, an oil painting of whom is to hang upon the walls of the French Federal Building, where will be displayed types of all the allied races.

A majority of the Indians of the Five Civilized Tribes who were in military service have been discharged, and reports indicate that most of them have returned to their former occupations. When assistance has been necessary in securing employment for them, field employees and this office have made special effort to be helpful. It is plainly evident that Indians in military service, especially full bloods, have received great benefit from their experiences in the training camps and overseas. To many of them the war has been a liberal education, broadening their views of life and inspiring in them new ambitions and higher ideals.

The following statement shows individual Indian funds disbursed under the immediate supervision of the field employees, and to a considerable extent summarizes the work performed by the field force:

Business transacted by field force, fiscal year 1919.

Permanent improvements.....	\$338, 816. 78
Live stock.....	87, 474. 65
Implements, harness, etc.....	90, 967. 27
Furniture.....	44, 061. 73
Cash, groceries, feed, physician, drugs, etc.....	307, 733. 11
Land and other investments.....	95, 932. 28
Miscellaneous.....	145, 632. 71
Total.....	1, 110, 618. 53

The following statement shows the amount of money disbursed to individual Indians, including amount expended under supervision and disbursements made by check direct to allottees on advice of field clerks:

Land sale, equalization and restricted per capita payment accounts..	\$862, 308. 36
Royalties.....	1, 950, 023. 08
Per capita payments (approximately).....	5, 000, 000. 00
Total.....	7, 812, 331. 44

The above total shows an increase of more than \$3,000,000 over the total for last year. All disbursements included in this amount were made either directly under the supervision of the field clerks, probate attorneys, and superintendent of construction, or upon their recommendations.

Government restrictions and high prices of materials limited building operations, only such as were absolutely necessary being done. Due to the rapid advance in prices it has been difficult and sometimes impossible to erect adequate buildings for Indians who have only limited funds. Quite a number of good houses and other improvements, however, have been completed and others are in course of erection.

INDUSTRIAL WORK—GOVERNMENT FARMERS.

Due to the severe drought of last year, feed and seed were very scarce and expensive. Funds for the purchase of seeds for Indians on the reimbursable plan were very limited and only a few of the more needy communities could be given assistance. Indian farmers generally, however, succeeded in securing seed supplies, and reports show that they have again increased their cultivated acreage. Some districts report several thousand acres of new land having been placed in cultivation by restricted Indians. Wheat, oats, potatoes, hay, and fruits have yielded well and prospects for other crops are very promising.

Stock and poultry raising are receiving a larger share of attention from the Indians than ever before, and it is unusual to find an Indian family without a good garden. Many Indian women are very proficient in canning and drying fruits and vegetables.

At fairs held during the autumn, 1918, although they had been confronted with perhaps the most adverse crop conditions this State had experienced, Indian farmers had many creditable exhibits and secured a number of prizes in direct competition with white exhibitors. At the Muskogee free State fair a Creek Indian, James Childers, won one first and one second prize. He was also awarded 4 first and 2 second prizes at the Tulsa County fair, and 1 third, 2 second, and 4 first prizes at the Broken Arrow district fair, making a total of 13 prizes, the largest number reported as having been awarded any Indian. At county and district fairs held during the year Indians of the Five Civilized Tribes won 38 first, 12 second, and 3 third prizes.

The Oklahoma Legislature has appropriated \$50,000 for a permanent agricultural and Indian exhibits building at Muskogee. This building is now in course of erection and will be ready for occupancy during the free State fair to be held from September 29 to October 4, 1919.

SPECIAL INSPECTIONS.

During the year 12 arrests were made upon complaints filed by special inspectors. Of the persons arrested seven were charged with criminal conspiracy and obtaining money under false pretenses in connection with the sale of Indian lands. These defendants are now awaiting trial in the district court. Of the five remaining, one charged with forgery is now in jail awaiting the action of the Federal grand jury; one charged with presenting a false claim against the Government is now serving two and a half years in the Federal penitentiary at Leavenworth; one arrested for embezzlement of funds belonging to a restricted Indian will be prosecuted in the State court; one Army officer charged with adultery with a restricted Indian minor was court-martialed and sentenced to Fort Leavenworth, and one Army officer charged with assault on the person of the same minor received a dishonorable discharge from the Army. In addition to the above the special inspector is now assisting the Post Office Department in securing evidence against approximately 15 persons who are charged with forging Government checks.

Special investigations in two civil cases have resulted in suit being instituted in the Federal court to recover the real and personal property of the Indian owners. In several other cases property has been recovered without resorting to the courts.

In one instance a fake life-insurance company had secured from several full-blood Indians Liberty bonds, war savings stamps, and money to the amount of approximately \$6,000 in exchange for their worthless stock. In another instance Indian lessors had been defrauded out of \$2,000 by the agent of an oil company holding leases on their lands. In both of the above-cited cases this property was recovered and returned to the Indians through the instrumentality of the special inspector. In addition several head of live stock have been recovered and returned to Indians for whom they were purchased. Several other miscellaneous investigations of importance have been made, including complaints against three postmasters for the manner in which they were handling Indian mail. These cases have been referred to the Post Office Department for appropriate action. In one of these cases the governor revoked the notarial commission of the postmaster upon the recommendation of the special inspector because of irregularities in the use of his seal on a deed executed by a full-blood Indian.

RESTRICTIONS DIVISION.

Under the act of Congress approved May 27, 1908 (35 Stat., p. 312), the Secretary of the Interior is authorized to remove the restriction against alienation from any restricted allotment, wholly or in part.

During the year a competency commission has visited the members of the Creek Tribe of Indians. Removals approved on the recommendation of the competency commission and removals handled in the usual manner are as follows:

Conditional, land sold.....	575
Unconditional, on recommendation of this office.....	123
Unconditional, on recommendation of competency commission.....	141
Total removals.....	839

The act of Congress approved May 27, 1908 (35 Stat., p. 312), authorizes restricted Indians to lease their surplus allotments for agricultural and grazing purposes for not to exceed five years, and their homestead allotments not to exceed one year, without departmental approval. Such leases are commonly known as commercial leases. Leases, in order to be valid for periods longer than five and one year, respectively, must be approved by the Secretary of the Interior. Many restricted Indians, under this law, lease their lands for inadequate considerations, and the department frequently finds itself unable to render assistance and estopped from protecting the interest of the Indian. Instead of encouraging the Indian to live upon his allotment, this law results in his being overreached in too many instances and in perpetuating an undesirable lease system in eastern Oklahoma, detrimental alike to the Indian and to the community in which he resides.

It is the general rule that surplus allotments adapted to tillage are covered by agricultural leases with unexpired terms, varying from one to five years. These leases lower the sale value. Purchasers can not afford to pay the full value for tracts where valid leases preclude possession for a term of years. Frequently the entire rental for the term of the lease is paid in full. Only in rare instances do the Indians receive adequate rentals.

During the year 891 new applications were received and filed, and 150 applications which had been previously denied or dismissed were reinstated, making a total of 1,041 cases. There were advertised for sale under conditional orders 693 tracts of land, on 382 of which bids were received and accepted. The amount of the accepted bids was \$406,910.52.

Since the act of Congress of May 27, 1908, became effective, there have been filed 17,045 applications for removal of restrictions, and the following tables show the action thereon, the acreage from which the restriction on alienation has been conditionally and unconditionally removed, also removals for school sites under the act of Congress approved May 29, 1908.

Status of restriction cases for period ending June 30, 1919.

Nation.	Pending.	Approved.			Canceled.	Denied.	Dis- missed.	Total.
		Condi- tional.	Uncon- ditional.	School site.				
Choctaw.....	28	2,817	1,480	77	228	449	826	5,905
Chickasaw.....	12	553	678	19	30	160	220	1,606
Cherokee.....	16	2,442	1,839	41	142	368	703	6,080
Creek.....	199	981	464	47	54	356	430	2,581
Mississippi-Choctaw..	33	480	51	6	30	25	79	664
Seminole.....	1	98	21	4	5	24	30	189
Total.....	289	7,320	4,527	194	489	1,882	2,344	17,045

Acres from which restrictions have been removed by the Secretary of the Interior, acts of May 27 and 29, 1908.

Nation.	Conditional (land sold).	Unconditional.	Schoolsite.	Total.
Choctaw.....	249,006.72	178,283.11	110.57	427,349.40
Chickasaw.....	37,471.71	80,739.94	38.50	118,250.15
Cherokee.....	104,080.39	85,884.20	42.85	189,907.44
Creek.....	48,642.31	26,461.92	50.00	75,154.23
Mississippi-Choctaw.....	39,231.16	3,463.04	4.00	42,698.20
Seminole.....	4,402.23	743.59	15.17	5,165.99
Total.....	482,783.52	375,480.80	261.09	858,525.41

Conditional removal of restrictions, sales made under departmental supervision to June 30, 1919.

Nation.	To June 30, 1918.			For fiscal year ending June 30, 1919.		
	Area (acres).	Average price per acre.	Amount received.	Area (acres).	Average price per acre.	Amount received.
Choctaw.....	267,274.07	\$8.45	\$2,259,511.11	20,755.57	\$12.05	\$250,118.86
Chickasaw.....	35,245.62	12.25	435,337.59	2,214.57	17.98	39,827.60
Cherokee.....	92,080.35	10.74	988,999.84	11,978.48	14.49	161,800.91
Creek.....	118,915.37	17.78	2,114,808.68	2,844.23	38.59	104,075.50
Seminole.....	5,627.60	14.49	82,563.88	812.06	30.92	25,110.27
Total.....	517,132.01	11.31	5,851,119.10	38,606.00	15.04	580,728.16

Allotted land from which restrictions have been removed to June 30, 1919.

Nation.	Acres.						Total.
	Act of July 1, 1902.	Act of Apr. 21, 1904.	By operation of law, Aug. 8, 1907.	Act of May 27, 1908.	Act of May 29, 1908.	Town site removals, act Mar. 3, 1903.	
Choctaw.....	229,600	317,400	.....	3,492,648	115	3,515	4,043,278
Chickasaw.....	207,700	298,000	.....	2,732,546	38	1,187	3,240,471
Cherokee.....	.....	318,500	.....	3,201,266	43	3,086	3,517,845
Creek.....	78,110	849,480	364,680	1,112,110	50	6,849	2,106,279
Seminole.....	.....	44,000	.....	158,591	15	.....	238,006
Total.....	510,410	1,523,380	364,680	10,697,561	261	14,587	13,110,879

Removal of restrictions by the Secretary of the Interior, Five Civilized Tribes.

Fiscal year.	Act of May 27, 1908.		Act of May 29, 1908.		Total.
	Number of tracts.	Acres.	Number of tracts.	Acres.	
1909.....	1,865	52,761.09	9	12.50	52,773.59
1910.....	1,470	88,070.24	41	68.64	88,138.88
1911.....	953	84,679.24	18	25.00	84,705.24
1912.....	652	45,075.51	27	24.42	45,099.93
1913.....	956	60,532.64	27	54.61	60,587.25
1914.....	1,106	81,084.72	15	28.50	81,113.22
1915.....	796	50,077.32	15	28.87	50,106.00
1916.....	697	42,103.60	5	6.83	42,110.23
1917.....	1,436	155,403.17	14	28.22	155,431.39
1918.....	1,532	141,534.20	1	2.00	141,536.20
1919.....	839	57,002.28	1	1.00	57,003.28
Total.....	12,204	858,264.32	174	261.09	858,525.41

Comparative statement of sales consummated under conditional removals.

Fiscal year ended June 30.	Tracts sold.	Acres sold.	Consideration received.
1909.....	180	10,924.21	\$149,422.20
1910.....	629	53,192.75	566,666.57
1911.....	871	67,790.47	674,720.71
1912.....	804	38,277.39	316,083.66
1913.....	735	51,817.99	502,406.36
1914.....	934	66,104.33	626,042.80
1915.....	634	41,631.52	430,320.96
1916.....	550	33,017.65	385,422.21
1917.....	530	32,775.62	407,566.96
1918.....	714	48,745.69	660,301.64
1919.....	576	38,606.00	580,726.16
Total.....	6,826	482,783.52	5,284,635.28

Status of cases of conditional removals June 30, 1919.

Authorized:

Cases where land partly or all sold.....	6,826
Pending sales.....	77
Cases where land remains unsold.....	245
Cases where land withdrawn from sale on account of clouded title, request of allottees, or on account of long time leases.....	172

Total..... 7,320

The following tables show the status of inherited land deeds:

Status of inherited land cases for fiscal year ended June 30, 1919.

Number of cases filed:

Approved.....	674
Disapproved.....	9
Dismissed.....	347
Pending in this office or returned to field clerks.....	278
Pending in department.....	10

Total..... 1,318

Nation.	Pending in—		Approved.	Disapproved.	Dismissed.	Total.
	Agency.	Department.				
Choctaw.....	46	3	141	2	121	313
Chickasaw.....	12	.....	37	.....	16	65
Cherokee.....	28	2	83	.....	60	173
Creek.....	175	4	388	6	133	706
Mississippi Choctaw.....	12	.....	19	1	13	45
Seminole.....	5	1	6	.....	4	16
Total.....	278	10	674	9	347	1,318

LEASE DIVISION.

The following tables show the status of leases heretofore filed with this office:

LEASES FILED.

Oil and gas.....	38,962
Coal and asphalt.....	509
Miscellaneous.....	310
Agricultural.....	3,368
Total.....	43,149

DISPOSITION OF LEASES FILED.

Approved and in effect:

Oil and gas.....	5,871
Coal and asphalt.....	104
Miscellaneous.....	100
Agricultural.....	1,748

Total.....	7,823
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Surrendered or canceled by the department:

Oil and gas.....	17,173
Coal and asphalt.....	156
Miscellaneous.....	55
Agricultural.....	155

Total.....	17,539
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Canceled by agreement:

Oil and gas.....	226
Coal and asphalt.....	4

Total.....	230
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Expired:

Oil and gas.....	721
Coal and asphalt.....	15
Miscellaneous.....	16
Agricultural.....	319

Total.....	1,071
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Removed from departmental supervision after approval:

Oil and gas.....	5,174
Coal and asphalt.....	84
Miscellaneous.....	13
Agricultural.....	191

Total.....	5,462
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Withdrawn or disapproved by department:

Oil and gas.....	8,096
Coal and asphalt.....	101
Miscellaneous.....	104
Agricultural.....	792

Total.....	9,093
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Canceled for failure to refile:

Oil and gas.....	537
Coal and asphalt.....	39
Miscellaneous.....	12
Agricultural.....	23

Total.....	611
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Returned to lessee, no jurisdiction:

Oil and gas.....	146
Coal and asphalt.....	5
Miscellaneous.....	7
Agricultural.....	43

Total.....	201
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Pending at department:	
Oil and gas.....	221
Coal and asphalt.....	
Miscellaneous.....	
Agricultural.....	
Total.....	221
Pending in this office:	
Oil and gas.....	797
Coal and asphalt.....	1
Miscellaneous.....	3
Agricultural.....	97
Total.....	898
Total leases filed.....	43, 149
Pending in this office June 30, 1918.....	266
Filed during year ended June 30, 1919.....	2, 213
Total.....	2, 479
Leases forwarded for approval or disapproval.....	1, 573
Leases returned to lessee, no jurisdiction.....	8
Leases pending in this office June 30, 1919.....	898
Total.....	2, 479

ASSIGNMENTS.

Assignments pending June 30, 1918.....	161
Assignments filed during year ended June 30, 1919.....	886
Total.....	1, 047
Assignments forwarded to the department and acted upon by the superintendent.....	804
Assignments dismissed.....	36
Total.....	840
Assignments pending June 30, 1919.....	207
Total.....	1, 047

During the year there were received approximately 18,000 personal affidavits of stockholders, showing their interests in corporations holding oil and gas leases covering lands of the Five Civilized Tribes. The general public seems to be investing more largely in oil stocks; the stock of practically all of the larger corporations holding leases in the Five Civilized Tribes is on the market and some of the newer companies seem to be organized principally for the purpose of selling stock. Under these conditions the ownership of stock is constantly changing, causing new affidavits to be filed, and necessitating an examination of the stockholders' cards in connection with practically every lease or assignment forwarded for departmental consideration.

Very little interest has been displayed in coal and asphalt leases, or miscellaneous mineral leases, only a few of this class of leases having been filed during the year.

Notwithstanding the fact that special effort has been made to induce the Indians to advise with the field clerks before entering into any contract affecting their allotments, and to make all leases

on their lands subject to departmental approval, a less number of agricultural and grazing leases were received than during the preceding year. Many conflicting agricultural leases are received, in many instances requiring personal investigations.

In a number of cases where allottees complained that their lands were being held for a grossly inadequate rental, investigation disclosed that the lands were held under commercial leases. Where the lease was found to be invalid, the lessee has been notified to vacate the premises, and in a few instances the lessee has, upon receipt of such notice, secured and filed a departmental lease at an increased rental. Where the lessees refused to do this, and failed to vacate the premises, the matter has been referred to the probate attorney for proper action.

Fewer assignments were filed than during the preceding year, but of those filed a great number were not properly completed, making it impossible to submit them for departmental consideration and action.

On July 1, 1918, there were pending in this office 10 stipulations proposing to modify and extend terms of approved leases, and 30 such stipulations were filed during the year. Thirty stipulations were forwarded for departmental action, and 10 are pending here at this time.

PIPE LINES.

Easements for pipe lines, telephone and telegraph lines, pump stations, and tank sites for fiscal year.

Applications filed prior to July 1, 1918.....	348
Applications filed during fiscal year ended June 30, 1919.....	22
Total.....	370
Applications approved or withdrawn prior to July 1, 1918.....	294
Applications approved during fiscal year ended June 30, 1919.....	20
Applications withdrawn during fiscal year ended June 30, 1919.....	7
Applications pending in this office awaiting additional information from applicants.....	12
Applications pending in this office awaiting opinions of allottees in re assessment of damages.....	7
Applications pending in this office awaiting inspection of lines and assessment of damages.....	24
Applications filed during fiscal year:	
For pipe-line rights of way.....	17
For telephone and telegraph line rights of way.....	2
For pump-station sites.....	3

While the number of applications filed during the year is less than that of the preceding year, yet some of the lines are long lines connecting the Cushing and Healdton fields with the State of Texas, and are of considerable importance in increasing competition in the purchase of available oil. The shorter lines connect producing fields with trunk lines, refineries, or markets for natural gas, and are always of material value in increasing the marketing facilities for both oil and natural gas.

SEGREGATED COAL LAND LEASES.

On June 30, 1914, there were in force under the act of June 28, 1898 (30 Stat., 495), 109 segregated coal leases, covering 99,800 acres. The act of March 4, 1913 (37 Stat. L., 1007), authorized the

Secretary of the Interior to lease additional acreage, not to exceed 640 acres, adjoining leases which were being operated in good faith on the date of the act, where the additional acreage is necessary for the operation of the mine. Applications filed under this act are investigated, and if the facts warrant and the Secretary approves, a lease covering the land applied for is executed, subject to the approval of the Secretary of the Interior.

Disposition of applications filed for additional acreage under act of Mar. 4, 1913.

Applications approved by Secretary of the Interior.....	31
Applications withdrawn.....	4
Applications denied.....	16
Total.....	51

On March 19, 1919, the department held that in view of the act of February 8, 1918, providing for the sale of the coal and asphalt deposits, it would be inadvisable to continue leasing segregated coal lands, since which date all applicants have been advised of this ruling and of the next sale.

During the year leases of the following lessees were canceled:

St. Louis-Galveston Coal & Mining Co., lease No. 1.
 Phoenix Coal Co.
 Pocahontas Coal Co.
 Denison Coal Co.

Rentals for agriculture and grazing tribal lands.

Tracts tribal land rented:	
Choctaw-Chickasaw Nations, segregated land.....	114
Creek Nation.....	19
Seminole Nation.....	1
Total.....	134

A statement of the amounts received from this source appears under the head of "Royalty."

ROYALTY DIVISION.

In the royalty division are kept the accounts of individual lessors and lessees showing receipts from lessees and disbursements to lessors. Advance royalty and annual rental are paid on nonproducing leases directly to this office by lessees, while royalty on producing leases is remitted by pipe line companies under division orders approved by this office.

Open accounts and classifications.

Open accounts, June 30, 1919.....	10, 618
Producing accounts, June 30, 1919.....	1, 336
Nonproducing accounts.....	6, 159
Agricultural accounts.....	1, 361
Leases canceled (bond held).....	244
Tribal coal lease accounts.....	129
Tentative leases.....	53
Pipe line accounts.....	883
Miscellaneous accounts.....	63
Total.....	10, 228
Decrease.....	390

Leases, cancellations, and claims.

Leases canceled, in whole or in part.....	1, 302
Leases canceled, delinquent.....	244
Leases canceled, delinquent preceding year.....	130
Percentage of delinquency this year.....	19. 3
Percentage of delinquency preceding year.....	8. 7
Total claims arising during fiscal year unpaid.....	\$11, 955. 98
Old claims.....	10, 698. 17
Total unpaid claims, June 30, 1919.....	22, 654. 15

Of this amount there is due from—

Equitable Surety Co. (now liquidating).....	\$4, 535. 51
New England Equitable Surety Co.....	230. 00
Illinois Surety Co. (receivership).....	1, 383. 50
No bond (all agricultural).....	1, 032. 50
Personal surety.....	3, 516. 66
Total old claims.....	10, 698. 17
New claims.....	11, 955. 98
Total claims.....	22, 654. 15

The judgment against the Federal Union Surety Co. for claims pending since 1908 and 1909 has been paid in full.

INCOME TAX.

Three hundred and seventy-five cases of possible claims against restricted Indians for income tax were investigated and of this number income tax was paid for 261, the amount paid being \$407,408.95.

GROSS PRODUCTION TAX.

In accordance with the decision of the United States Supreme Court the State of Oklahoma was required to refund all gross production tax paid by lessees on production from restricted departmental leases. On demand of the State auditor over 1,000 certificates showing production on restricted land were prepared for use of lessees in securing refunds.

CASING HEAD GAS.

The manufacture of gasoline from casing head gas produced from restricted Indian lands and the correspondence and records have required practically the entire time of one special clerk and stenographer. The increased revenue resulting from a close check on rates used as a basis for remittances and from notices to delinquent lessees amounted during the year to more than \$30,000.

NINE MONTHS DRILLING REQUIREMENT.

On January 21, 1919, the Secretary rescinded the order requiring lessees to develop leases within nine months from date of approval so far as it pertained to new leases. There were about 575 leases containing this requirement. This office has recommended that the requirement to drill in nine months be waived in all cases.

Miscellaneous.

Vouchers paid during the year.....	24, 292
Division orders approved.....	196
Pieces of mail received.....	18, 021

Receipts and disbursements, oil, gas, and other individual royalties from 1904 to 1919.

Fiscal year.	Receipts.	Disbursements.	Fiscal year.	Receipts.	Disbursements.
1904.....	\$1,300.00		1913.....	\$1,496,179.31	\$1,201,362.09
1905.....	91,694.40	\$61,931.35	1914.....	2,059,836.14	1,530,195.32
1906.....	323,855.40	339,279.01	1915.....	1,853,065.87	1,195,223.72
1907.....	776,499.15	679,347.45	1916.....	3,996,426.68	1,266,216.91
1908.....	1,662,637.55	1,685,675.28	1917.....	4,441,645.53	2,377,198.58
1909.....	1,813,430.28	1,802,863.20	1918.....	4,676,625.15	7,637,771.20
1910.....	1,420,394.97	1,301,506.99	1919.....	4,523,622.95	5,210,873.21
1911.....	1,365,826.52	1,191,997.18			
1912.....	1,184,432.34	1,123,964.08	Total.....	31,756,504.74	28,596,301.56

Coal leases acquired under act of June 28, 1898.....	105
Acreage embraced, including additional tracts.....	101, 942. 66
Coal leases acquired under act of Mar. 4, 1913.....	18
Acreage embraced.....	7, 851. 23
Number of asphalt leases.....	5
Tons of coal mined during fiscal year.....	3, 055, 016
Tons of coal mined during preceding year.....	3, 227, 595
Advance royalty and royalty on production during fiscal year.....	\$231, 969. 45
Advance royalty and royalty on production during preceding year..	\$276, 186. 82
Advance royalty paid on asphalt leases.....	\$2, 000. 00

CASHIER'S DIVISION.

Collections of tribal moneys have fallen off nearly \$2,000,000 as compared with the previous fiscal year, due to the decreasing number of tracts of land sold and to the several successive crop failures in Oklahoma, which necessitated numerous extensions of payments.

The per capita payments previously authorized were continued and new payments made under act of May 25, 1918, of \$200 per capita to the Choctaws and Chickasaws, of \$100 per capita to the Seminoles, and of a payment to equalize allotments to the members of the Creek Nation up to the amount of \$860. These payments have been made as follows:

Nation.	Amount per capita.	Number paid.	Amount.	
			Authorized.	Paid.
Choctaw.....	\$300	20, 799	\$4, 158, 800. 00	\$3, 728, 094. 87
Chickasaw.....	200	6, 304	1, 260, 800. 00	1, 192, 801. 66
Seminole.....	100	3, 127	312, 700. 00	286, 770. 98
Creek equalization.....		14, 184	1, 990, 000. 00	1, 394, 144. 04
Total.....			7, 723, 300. 00	6, 675, 811. 55

About 10 per cent of the total amount paid was transferred to individual Indian money accounts, the balance being paid direct to Indians.

To make these payments it was necessary to withdraw from Oklahoma banks \$626,160.22 of tribal moneys, as the amounts available in the United States Treasury were insufficient. Further withdrawals will have to be made in the near future for new per capita payments,

and these withdrawals will be, at least, partly replaced with individual Indian moneys of the Five Civilized Tribes.

There is a total amount of individual moneys on deposit in 142 National and 32 State banks in Oklahoma, aggregating \$5,966,223.28. These banks are paying from 3 to 4½ per cent interest, the largest part of this money bringing 4 per cent interest since January 1, 1919. By this increase in the interest rate, we were enabled to credit interest for the six-month period ending June 30, 1919, to about 11,000 individual Indian accounts at the rate of 3½ per cent per annum.

While the war savings stamps purchased for our restricted Indians are being carried in the accounts of the cashier at their cash value, the Liberty loan bonds of all issues, in the amount of \$10,264,000, are all registered in the name of the Secretary of the Interior as trustee for the 290 individual subscribers, and are deposited for safe-keeping with the Treasurer of the United States.

The financial statement in detail follows:

Receipts.

Tribal collections:

Choctaw-Chickasaw Nations—		Choctaw.	Chickasaw.	
Coal and asphalt royalties.....	\$165,341.55	\$55,113.83		
Rental on tribal lands.....	1,319.44	439.81		
Sale of unallotted lands.....	393,653.86	131,217.97		
Sale of timberlands.....	665,862.24	221,954.06		
Sale of surface or segregated coal and asphalt lands.....	248,970.10	82,990.02		
Sale of improvements on tribal lands.....	3,423.86	1,141.29		
Sale of town lots.....	2,827.34	942.45		
Sale of town-site maps.....	5.99	4.50		
Pipe-line damages.....	108.18	36.06		
Telephone-line damages.....	90.75	30.25		
Interest on deferred payment, Bloomfield Academy.....	183.26	61.09		
	<u>1,481,786.57</u>	<u>493,931.33</u>		\$1,975,717.90
Creek Nation—			Creek.	
Rental on tribal lands.....		465.75		
Sale of unallotted lands.....		12,011.06		
Sale of town-site maps.....		1.85		
Sale of improvements.....		8.25		
				<u>12 486.91</u>
Cherokee Nation—				
Sale of unallotted lands.....		722.00		
Sale of improvements.....		12.50		
Sale of town-site maps.....		1.50		
				<u>736.00</u>
Total tribal collections.....				<u><u>1,988,940.81</u></u>

Individual Indian moneys:

Royalty accounts—		Miscellaneous.	
Royalties on production.....	\$3,416,805.10		
Advance royalty and bonus.....	657,180.12		
Interest on investments.....	255,863.52		
Interest on bank accounts.....	130,405.05		
Redeposits.....	63,269.16		
			<u>4,523,522.95</u>

Individual Indian moneys—Continued.

Other individual Indian moneys—	Miscellaneous.	
Proceeds from land sales.....	\$457, 559. 97	
Transfers from tribal payments.....	648, 951. 02	
Redeposits and other sources.....	108, 494. 48	
Interest.....	61, 869. 90	
		\$1, 276, 875. 37
War savings stamps purchases.....	315, 420. 40	
Increase in value of war savings stamps.....	21, 181. 50	
		336, 601. 90
Total individual Indian moneys.....		<u>6, 137, 000. 22</u>

Miscellaneous moneys:

Sale of town-site maps.....	\$32. 00
Sale of property at Collins Institute.....	852. 05
Rentals at Collins Institute.....	24. 00
Sale of lease blanks.....	2, 931. 25
Sale of certified copies and State maps.....	4, 354. 25
Sale of certified copies under section 8, act of Apr. 26, 1906.....	23, 687. 26
Sale of junk.....	7. 28
Filing fees, oil and gas leases, assignments and stipulations.....	13, 362. 00
Pipe line inspection fees.....	38. 50
Interest on special deposits.....	28, 276. 51
Advertising fees on allotted lands.....	5, 362. 25
Overpayment on advance, royalty.....	4, 783. 95
Refunds and reimbursements, appropriations.....	6, 083. 64
Board, etc., Euchee Boarding School.....	207 71

Total miscellaneous moneys..... 90, 002. 65

Total.....	8, 215, 943. 68
Received by Treasury warrants on requisition.....	7, 255, 352. 80
Received tribal funds from banks.....	626, 160. 22

Total receipts..... 16, 097, 456. 70

Balance carried over from previous year:

Congressional appropriations.....	\$98, 270. 96
Tribal funds.....	1, 314, 999. 07
Miscellaneous moneys.....	3, 340. 58
Individual Indian moneys.....	5, 869, 196. 68
Outstanding liabilities.....	1, 456. 42
War savings stamps held for individual Indians....	506, 488. 20

7, 793, 751. 91

Grand total..... 23, 891, 208. 61

Disbursements.

CONGRESSIONAL APPROPRIATIONS.

Administration of affairs, Five Civilized Tribes, Oklahoma, 1918:

Salaries of regular employees.....	\$106. 67
Traveling expenses.....	3, 327. 62
Office rents.....	194. 25
Sundry purchases and expenses.....	472. 76

\$4, 101. 30

Administration of affairs, Five Civilized Tribes, Oklahoma, 1919:

Salaries of regular employees.....	132, 232. 46
Traveling expenses.....	26, 512. 87
Office rents of field clerks.....	4, 858. 51
Sundry purchases and expenses.....	18, 007. 39

181, 611. 23

Industrial work and care of timber, 1918:		
Traveling expenses.....	\$17. 40	
		\$17. 40
Industrial work and care of timber, 1919:		
Salaries of regular employees, farmers.....	11, 001. 95	
Traveling expenses of farmers.....	4, 732. 26	
Sundry purchases and expenses.....	422. 14	
		16, 156. 35
Probate attorneys, Five Civilized Tribes, 1918:		
Salaries of regular employees.....	230. 27	
Traveling expenses.....	904. 87	
Office rents.....	63. 75	
Sundry purchases and expenses.....	163. 72	
Legal expenses.....	23. 20	
		1, 385. 81
Probate attorneys, Five Civilized Tribes, 1919:		
Salaries of regular employees.....	69, 372. 23	
Salaries of temporary employees.....	496. 67	
Traveling expenses.....	5, 383. 28	
Office rents.....	3, 782. 49	
Sundry purchases and expenses.....	2, 011. 68	
Legal expenses.....	570. 21	
		81, 616. 56
Oil and gas inspectors, Five Civilized Tribes, 1919:		
May 16 to June 30, 1919.		
Salaries of regular employees.....	942. 09	
Traveling expenses.....	178. 51	
Sundry purchases and expenses.....	31. 35	
		1, 151. 95
Indian schools, Five Civilized Tribes, 1918:		
Payments for aid of district schools in eastern Oklahoma.....	80, 178. 97	
Sundry expenses.....	11. 40	
		80, 190. 37
Indian schools, Five Civilized Tribes, 1919:		
Salaries of regular employees.....	8, 784. 67	
Salaries of temporary employees.....	217. 00	
Traveling expenses.....	971. 65	
Sundry expenses.....	274. 49	
Payments in aid of district schools in eastern Oklahoma.....	178, 020. 24	
		188, 268. 05
Pay of Indian police, 1918:		
Salaries of regular employees.....	30. 00	
		30. 00
Pay of Indian police, 1919:		
Salaries of regular employees.....	7, 289. 00	
Miscellaneous purchases.....	427. 08	
		7, 716. 08
Relieving distress and prevention of disease among Indians, 1919:		
Relief of sick and indigent Indians.....	62. 70	
		62. 70
Increased compensation, Indian Service, 1918.....		13. 75
		13. 75
Increased compensation, Indian Service, 1919.....		23, 025. 00
		23, 025. 00
Industry among Indians, 1917-18:		
Purchase of seeds for distribution to Indians.....	1, 132. 58	
		1, 132. 58
Industry among Indians, 1918-19:		
Purchase of seeds for distribution to Indians.....	4, 639. 84	
		4, 639. 84
Cherokee Orphan Training School, Five Civilized Tribes, 1919:		
Salaries of regular employees.....	416. 83	
		416. 83

General expenses, Indian Service, 1919 (competency commission):

Purchase of one Ford car.....	\$584. 06	
		<u>\$584. 05</u>

Total disbursed from congressional appropriations.....		592, 119. 85
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TRIBAL FUNDS.

Tribal officers, salaries and expenses.....	22, 284. 81	
Tribal attorneys, under contract, salaries and expenses.....	24, 804. 93	
Refunds and expenses, account sale of tribal lands and coal and asphalt deposits.....	39, 706. 24	
Expenses per capita and equalization payments.....	32, 068. 45	
Per capita payments.....	5, 673, 921. 13	
Payments in lieu of allotments.....	1, 425, 722. 73	
Expenses and repairs of tribal schools and other tribal property.....	13, 406. 53	
		<u>7, 231, 914. 82</u>

INDIVIDUAL INDIAN AND MISCELLANEOUS MONEYS.

Lease royalties:

Paid to Indians.....	\$1, 950, 023. 08	
Purchase of Liberty loan bonds.....	2, 762, 000. 00	
Purchase of war savings stamps.....	95, 037. 40	
Income tax paid.....	403, 812. 73	
		<u>5, 210, 873. 21</u>

Other Individual Indian moneys:

Paid to Indians.....	863, 245. 37	
Purchase of Liberty loan bonds.....	23, 850. 00	
Purchase of war savings stamps.....	220, 383. 00	
		<u>1, 107, 478. 37</u>

Overpayments on advanced royalties.....

5, 952. 42

Miscellaneous funds:

Certified copies, section 8.		
Salaries of regular employees.....	15, 120. 61	
Salaries of temporary employees.....	1, 558. 84	
Purchase of supplies and sundry expenses.....	2, 485. 97	
		<u>19, 165. 42</u>

Indian moneys, proceeds of labor, Five Civilized Tribes:

Salaries of regular employees.....	29, 086. 83	
Salaries of temporary employees.....	350. 84	
Traveling expenses.....	2, 107. 76	
Refunds.....	277. 44	
Sundry purchases and expenses.....	7, 146. 59	
		<u>38, 969. 46</u>

Indian moneys, proceeds of labor, Five Civilized Tribes, advertising: Advertising of allotted Indian land sales.....

1, 578. 65

Expenses, pipe-line inspection.....

38. 50

Indian moneys, proceeds of labor, Collins Institute: Expense of thrashing grain.....

273. 39

War savings stamps held for Indians:

Converted.....	41, 195. 00	
Delivered to Indians.....	2, 544. 50	
		<u>43, 739. 50</u>

Total individual Indian and miscellaneous moneys.....		<u>6, 428, 068. 92</u>
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Total disbursements.....		14, 252, 103. 59
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RECAPITULATION OF DISBURSEMENTS.

Congressional appropriations:		
General office, Five Civilized Tribes.....	\$102,424.59	
Field service, appraisers, farmers, police, oil inspection, etc.....	137,817.64	
School supervision and aid to district schools.....	268,875.25	
Probate work and legal expenses.....	83,002.37	
		\$592,119.85
Tribal funds:		
Indian tribal officers and attorneys, and expenses...	47,069.74	
Expenses tribal schools.....	13,090.39	
Tribal payments and other expenses.....	7,171,734.69	
		7,231,914.82
Individual Indian moneys paid to Indians.....		3,217,081.18
Government war securities purchased for Indians.....		3,101,270.40
Miscellaneous payments and expenses.....		109,717.34
		6,428,068.92
Total actual disbursements.....		14,252,103.59
Deposited Indian moneys to credit Five Civilized Tribes.....	1,988,941.81	
Deposited account sale of Government property.....	32.00	
Deposited to reimburse tribal funds.....	2,074.27	
Deposited to reimburse appropriations.....	4,763.73	
Deposited to reimburse sundry receipts.....	842.01	
Deposited unexpended balances.....	86,297.90	
Deposited miscellaneous funds.....	54,293.54	
		2,137,245.26
Balances on hand June 30, 1919:		
Congressional appropriations.....	70,339.23	
Tribal funds.....	958,699.19	
Miscellaneous moneys.....	6,177.18	
Individual Indian moneys.....	5,665,205.64	
Outstanding liabilities.....	1,456.42	
War savings stamps held for individual Indians.....	799,982.10	
		7,501,859.76
Total balances.....		23,891,208.61

Grand total..... 23,891,208.61

NOTE.—The amount of money on hand June 30, 1919, pending audit, aggregates \$863,693.51.

Analysis of disbursements of tribal funds.

	Choctaw.	Chickasaw.	Cherokee.	Creek.	Seminole.	Total.
Salaries and expenses of tribal school employees.....	\$2,872.65	\$2,412.18	.....	\$6,812.60	\$992.87	\$13,090.39
Expenses of per capita and equalization payments.....	13,503.41	4,231.35	.....	12,356.96	1,976.73	32,068.45
Repairs to tribal property and paying tax.....	80.53	.....	.....	226.61	.....	316.14
Expenses account sale of tribal lands.....	17,486.48	5,773.22	.....	.....	.....	23,259.70
Expenses account sale of coal and asphalt deposits.....	7,076.97	2,373.16	.....	.....	.....	9,450.13
Refunds account tribal land sale and payment for improvements.....	5,247.27	1,749.14	.....	.....	.....	6,996.41
Tribal officers and expenses.....	10,180.07	9,921.95	.....	2,203.79	.....	22,284.81
Tribal attorneys and expenses.....	7,033.20	7,147.20	.....	10,624.53	.....	24,804.93
Payments in lieu of allotments.....	5,927.10	.....	\$35,028.41	1,304,149.04	618.18	1,425,722.73
Per capita payments.....	4,094,540.39	1,253,833.24	2,368.35	.....	223,179.15	5,673,921.13
Total.....	4,163,936.07	1,287,441.44	27,396.76	1,426,373.62	326,786.93	7,231,914.82

MAIL DIVISION.

The mail division handled 814,722 items of mail as compared with 864,935 during the fiscal year 1918, classified as follows:

Incoming:	
Departmental letters.....	6, 403
Miscellaneous letters.....	106, 564
Stamped but unnumbered vouchers, applications, etc., approximately.....	275, 000
Total.....	387, 967
Outgoing:	
Departmental letters.....	8, 150
Miscellaneous letters.....	168, 605
Circulars, form letters, etc., approximately.....	250, 000
Total.....	426, 755
Grand total.....	814, 722

In addition to the above, there were mailed not less than 175,000 advertisements of allotted and unallotted land and coal and asphalt mineral deposits, the grand total aggregating a little less than 1,000,000 items.

UNITED STATES OIL INSPECTOR.

OIL AND GAS OPERATIONS.

One of the outstanding features in a résumé of field operations in the production of oil and gas within the area of the Five Civilized Tribes during the past fiscal year has been the inauguration of a systematic and thorough search for a new pool of oil. This activity has manifested itself principally during the last four months of the year. It has been brought about primarily by the discovery of oil and the development of important fields in the north central Texas region from Ranger to Burkburnett, Tex., on the Red River.

Southwestern Oklahoma, on the edge of the Chickasaw Nation, was the first section to feel the influence of this movement, and from this point it has spread northeastward through the several nations of the Five Civilized Tribes. Large blocks of acreage have been taken up in many places and test wells have been started in these areas, regardless of the fact that former tests in the general territory have been failures. Haphazard methods, formerly prevalent to a large extent, in selecting prospective areas in which to drill test wells have been entirely discarded, and it is possible that the application of the best scientific knowledge in the search for a new pool of oil in southwestern Oklahoma may be rewarded by a discovery of some importance.

A tabulation of development operations within the State, including the area of the Five Civilized Tribes and the Osage Nation, during the past fiscal year, shows 8,429 wells drilled, resulting in 5,386 producing oil wells, 775 producing gas wells, and 2,268 dry holes.

A close estimate of the production of oil in the various fields in the Five Civilized Tribes as of June 30, 1919, is as follows:

District.	Fourth quarter, 1918 (barrels daily).	Fourth quarter, 1919 (barrels daily).	District.	Fourth quarter, 1918 (barrels daily).	Fourth quarter, 1919 (barrels daily).
Cherokee deep sand:			Creek Nation—Continued.		
Bird Creek.....	5,000	5,800	Hamilton Switch.....	290	5,000
Bartlesville.....	5,900	4,600	Henryetta.....	325	520
Collinsville-Vera.....	500	300	Kellyville.....	400	300
Copan-Wann.....	1,500	950	Lost City and Red Fork.....	170	804
Hogshooter.....	180	250	Morris.....	2,700	2,540
Cherokee shallow:			Muskogee.....	250	425
Nowata.....	2,800	3,820	Mounds-Beggs.....	6,050	8,500
Delaware.....	1,150	1,190	Perryman.....	700	600
Chelsea.....	1,500	1,210	Schuler.....	250	400
Inola.....	135	225	Haskell-Stone Bluff.....	1,450	1,320
Cushing-Shamrock.....	48,500	41,227	Tiger Flats.....	1,650	4,000
Creek Nation:			Allen.....	625	750
Bald Hill.....	6,680	4,950	Healdton-Fox.....	52,205	33,784
Bixby-Leonard.....	7,600	3,750			
Boynton-Cole.....	4,600	2,380	Total production.....	167,710	125,282
Glenn Pool.....	14,400	13,250			

PRICES OF CRUDE OIL.

The general market price of midcontinent crude oil of \$2.25 per barrel has not changed throughout the past fiscal year. The only reduction made in price applied to Healdton crude oil, which was reduced on February 21, 1919, from \$1.45 to \$1.20 per barrel. The fact that this oil is inferior to the bulk of the production in the Oklahoma fields, and further, that there was considerable new production of high-grade oil developed in the north Texas fields, principally in Burkburnett, accounted for this reduction.

NEW POOLS.

There have been no new pools of oil of importance discovered in the Five Civilized Tribes during the past fiscal year. Several semi-promising areas have been opened up by the drilling in of test wells, namely, Comanche, Holdenville, and Hewitt, Okla.

Comanche.—On December 23, 1918, a test well, with a capacity of approximately 25 barrels daily, was completed in the vicinity of Comanche, Okla., in sec. 19, T. 2 S., R. 7 W. Since that time, two other producing wells, with a total daily capacity of about 75 barrels, have been completed. The sand is found at a depth of about 1,500 feet. No pipe-line facilities have as yet been extended to the territory, as the outlook at present would hardly justify the construction of a line. It is believed, however, that with careful prospecting work a pool of oil will be uncovered in this township.

Holdenville.—A gas well, with an estimated capacity of 20,000,000 cubic feet daily, was completed on February 6, 1919, at a depth of 1,850 feet, in the southeast corner of the SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ of sec. 18, T. 8 N., R. 10 E. This test is located about 8 $\frac{1}{2}$ miles northeast of Holdenville. In drilling the well, an additional flow of gas, estimated at 5,000,000 cubic feet daily, was encountered at a depth of 850 feet. The presence of these two gas sands at the depths specified has attracted the attention of oil producers, resulting in the taking up of a number of leases in this general territory, with the prospect that several other test wells will be drilled within the next six months.

Hewitt.—On May 31, 1919, a test well with a credited capacity of over 300 barrels daily, was completed at a depth of 2,110 feet in the northeast corner of the NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ of sec. 27, T. 4 S., R. 2 W. approximately $3\frac{1}{2}$ miles due east of the edge of the southeastern extension of the Healdton oil field. The steady daily production of this well since it was brought in gives every indication that there is a pool of oil in this locality.

OTHER DISTRICTS.

In the district west and southwest of Beggs, Okla., located close to the center of the intersection of townships 15 north, 11 and 12 east, and 14 north, 11 and 12 east, a number of good producing wells have been completed in a lower producing sand than has hitherto been explored in this territory. Completions, ranging in capacity of from 500 to 1,000 barrels per day, are not uncommon and have caused a complete revision of the former estimate of the oil and gas possibilities of this territory.

Okmulgee.—Several test wells drilled in the vicinity of Okmulgee have encountered a producing oil sand at a depth of approximately 2,900 feet. The wells average from 200 to 500 barrels each. The product is the best grade of oil. This sand is at least 250 feet deeper than the deepest producer in the Okmulgee district. It is believed that these discoveries will lead to systematic prospecting over the entire producing area of this field in order to determine the probable extent of this deeper pay sand.

The monthly leasing record shows acreage upon which leases were executed, initial bonus paid, and additional bonus required during the last fiscal year, as follows:

Month.	Acres.	Initial bonus paid.	Additional bonus required.
July.....	4, 219.46	\$7, 278.64	\$2, 953.00
August.....	4, 082.51	6, 179.36	604.61
September.....	2, 268.14	2, 948.37	455.00
October.....	3, 409.83	7, 110.10	270.00
November.....	1, 904.39	1, 174.22	1, 480.00
December.....	3, 239.70	4, 066.50	683.00
January.....	4, 944.47	9, 005.40	2, 000.00
February.....	14, 175.20	19, 309.93	7, 102.00
March.....	29, 887.23	30, 137.21	7, 863.00
April.....	46, 836.52	52, 894.51	8, 019.80
May.....	41, 587.08	54, 737.87	15, 634.56
June.....	34, 285.49	90, 065.07	30, 921.61
Total.....	191, 420.02	284, 937.18	78, 046.67

There was a phenomenal increase in the number of acres of land leased during the last five months of this year. A large proportion of this acreage is located in outside territory, having been taken up in blocks along with much larger areas of commercial land by companies with the purpose in view of drilling a test well on same. Such districts may be generally specified as Tahlequah, Stigler, Webbers Falls, Yeager, Holdenville, and Comanche. These various localities give a good indication of the general distribution of this leasing activity.

PIPE LINES.

There has not been any particular activity in new pipe line construction to serve any of the fields in the Five Civilized Tribes. The building of laterals from systems already in operation to serve new wells has not been extensive.

The principal activity in pipe line construction has been the extension of trunk lines from Oklahoma fields to tap the north central Texas development.

The Prairie Oil & Gas Co. has finished an 8-inch line from Cushing, Okla., to Ranger, Tex. This new line, with the one completed last year, gives the company two 8-inch lines connecting its Oklahoma production with the Texas field.

The Sinclair Pipe Line Co. has extended its main line from Cushing and Healdton to Ranger, Tex., and contemplates running same to the Gulf of Mexico.

The Cosden Oil & Gas Co. is building an 8-inch line from Yale and Tulsa, Okla., to the Ranger field, a distance of approximately 275 miles.

The number of wells served by purchasing pipe lines and independent agencies taking oil in the Cushing and Healdton fields, and the average daily production, separated as to departmental and commercial acreage, according to the latest information gathered by this office, are as follows:

Purchaser or pipe line company.	Departmental.		Commercial.	
	Estimated average daily production.	Number of wells.	Estimated average daily production.	Number of wells.
Cushing field.....	<i>Barrels.</i> 11,837	966	<i>Barrels.</i> 29,390	1,726
Healdton field.....	4,648	851	29,136	1,351

STORAGE OF OIL.

Cushing field.

A close estimate of the total amount of storage oil in the Cushing field and the owners thereof, as of June 30, 1919, is as follows:

	Tanks.	Amount.		Tanks.	Amount.
Standard group:			Miscellaneous refinery group—		
Carter Oil Co.....	234	10,326,658	Continued.		
Prairie Oil & Gas Co.....	156	6,011,636	The Texas Co.....	97	3,280,195
Standard of Indiana.....	53	25,000	Pierce Oil Corporations.....	9	79,188
Magnolia Petroleum Co.....	5	20,922	Total.....	203	3,628,818
Total.....	448	16,384,216	Independent interests:		
Miscellaneous refinery group:			Roxana Petroleum Co.....	11	258,814
Sinclair Oil & Gas Co.....	25	45,200	Silurian Oil Co.....	1	13,121
Cosden Pipe Line Co.....	20	None.	Total.....	12	271,935
Gulf Pipe Line Co.....	11	7,211	Miscellaneous storage.....		200,000
Indianola Refining Co.....	10	18,346	Grand total.....	663	20,484,969
C. B. Shaffer.....	24	198,678			
International Refinery.....	6	None.			
Webster Refinery.....	1	None.			

A comparison of the amounts of oil on hand, owned by the groups specified above, as between June 30, 1918, and the same date, 1919, is herewith presented:

Owners.	Storage.		Decrease.
	June 30, 1918.	June 30, 1919.	
Standard group.....	24, 077, 385	16, 384, 326	7, 693, 059
Miscellaneous refinery group.....	5, 528, 721	3, 623, 818	1, 899, 903
Independent interests.....	120, 850	271, 935	151, 085
Miscellaneous storage.....	300, 000	200, 000	100, 000
Decrease in total storage in Cushing field.....			9, 541, 877

The Carter Oil Co. and Prairie Oil & Gas Co. of the Standard group have been moving their surplus oil at the rate of from 200,000 to 600,000 barrels per month, and it is assumed that this oil is being used in their refineries in Indiana and New Jersey.

The Standard of Indiana and the Magnolia Petroleum Co. have practically exhausted their storage.

In the miscellaneous refinery group there has been a decrease in storage of approximately 1,900,000 barrels during the year. The Texas Co., which had the largest storage in this group, has moved over 1,000,000 barrels during this period.

The estimated total amount of storage oil in the Healdton field, and the owners thereof, as of June 30, 1919, is as follows:

Owners.	Tanks.	Amount.	Owners.	Tanks.	Amount.
Ardmore Production & Refining Co.....	2	None.	Pierce-Fordyce.....	2	5, 000
Bull Head Oil Co.....	1	None.	Pure Oil Pipe Line.....	1	5, 000
Carter Oil Co.....	57	2, 790, 000	Roxana Petroleum Co.....	13	None.
Cobden Fuel Co.....	8	315, 000	Saddle River Oil Co.....	13	190, 000
Chickasaw Refining Co.....	1	None.	Sinclair-Gulf Oil Co.....	8	5, 000
Empire Pipe Line.....	3	131, 000	Texas Co.....	17	498, 000
Gilmer Oil Co.....	5	159, 000	Terminal Refining Co.....	1	5, 000
Hamon & Colcord.....	1	None.	Westheimer & Daube.....	1	8, 000
Imperial Refining Co. ¹	1	53, 000	Total storage.....	209	7, 647, 000
Roxana Petroleum Co. ¹	3	53, 000	Total storage, June 30, 1918.....		11, 110, 264
Rockland Oil Co. ¹	3	91, 000	Decrease.....		3, 463, 264
Magnolia Petroleum Co.....	63	3, 339, 000			

¹ Leased by and oil owned by Empire Pipe Line.

These figures show a decrease in storage of 31.17 per cent in Healdton crude oil for the fiscal year 1919.

FIRE LOSSES.

Fire losses during the past fiscal year on tank farms and leases, both commercial and departmental, in the Cushing and Healdton fields, as reported to this office, were as follows:

	Barrels.
Cushing field.....	24, 250
Healdton field.....	55, 200

CASING-HEAD GAS.

The records of all producing oil and gas mining leases under the supervision of this office have been examined with the view of investigating conditions relating to the sale or utilization of casing-head

gas and the royalty returns therefrom. A complete file of such leases, separated into districts and classified under lessees, both as to those who are using their own gas in the manufacture of casing-head gasoline and those who are selling to outside parties, has been made in order to systematize the testing work.

The wide distribution of departmental leases, the small amount of casing-head gas produced on many of them, the fact that in most instances there is a larger percentage of commercial than departmental leases in every group of properties connected with any plant, and that the connections, piping arrangements, and location of vacuum stations have not always been installed with the greatest efficiency of operation in view, have introduced numerous complications in the field testing work.

There are a number of leases from which the casing-head gas is neither being utilized nor sold. In view of the importance of casing-head gas from a revenue-producing standpoint in the operation of oil and gas mining leases, there is every reason to assume that lessees will use their best efforts to get the additional income derived from this source. However, the office is now engaged in a systematic canvass of all departmental leases in order to be fully informed concerning the conditions. The testing work and revaluation of casing-head gas, recommendations as to the installation of meters and different accounting methods in the settlements on the basis of tests or plant production, as well as checking up leases in the field, have resulted in a very substantial increase in the present income to Indian lessors.

Lessees and purchasers, with few exceptions, have shown a splendid spirit of cooperation in an effort to satisfy the requirements of the department as expressed in the regulations.

A tabulation, showing number of plants, number of tracts, acres, and wells connected with each, separated as to departmental and commercial, both in the Cushing and Healdton fields, as of June 30, 1919, is as follows:

CUSHING FIELD.

Total number of plants.	Departmental.			Commercial.		
	Number of tracts.	Total acreage.	Number of wells.	Number of tracts.	Total acreage.	Number of wells.
54.....	72	7,819	761	163	14,430	1,496

HEALDTON FIELD.

11.....	11	770	180	40	3,015	625
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The records of the office with regard to the production of casing-head gas in the Cushing field show that 62 per cent of the lessee companies are using their own casing-head gas in the manufacture of gasoline and 38 per cent are selling their gas to independents. In the Healdton field 92 per cent of the lessees are using their gas and 8 per cent are selling to outside parties.

The above tabulation of casing-head gasoline plants in the Cushing field shows a closer grouping and a far larger percentage of departmental than commercial leases connected with gasoline plants than obtains in any other district in the Five Civilized Tribes.

OIL AND GAS INSPECTORS.

During the year extensive cooperative work was done with the various oil companies, in the Cushing and other fields, in the cementing or exclusion of water from the producing oil horizons. This work resulted in increased production, decreased cost of operation, and good will among the oil producers.

During the months of November and December, 1918, cooperative work was carried on with the Bureau of Internal Revenue securing data as a basis for the valuation and depletion of oil properties. This work included a detailed compilation of data showing the production on all Indian leases and the resulting decline in production from the time the wells were first drilled on Indian land, and covered producing acreage of more than 55,000 acres. The data thus secured was part of the general scheme of the Internal Revenue Bureau to secure sufficient information throughout the United States for working out decline curves and similar information as a basis for computing equitable taxation on producing oil and gas properties. Because of the large acreage owned by Indians, this work was of special importance.

USE OF CEMENT IN OIL WELLS.

To the 1st of May, 1919, there had been 182 wells cemented in the Cushing field; 141 of these were pumping after the cementing work was done, and the others were "standing in cement." This process usually takes from 10 to 15 days. On the 141 wells that had been put back to producing, there was an increase in production of 4,304 barrels daily. This amount of oil at the quoted market price of \$2.25 per barrel is equivalent to \$9,684 per day, and at \$3 per barrel, the price at which most of the oil is being sold, to \$12,912 a day. Of course, we have no definite data on the length of time this increased production will continue, except that it is known to have continued several months in many instances. If this increased production should hold for one year, it would mean \$2,905,200 to \$3,873,600. Assuming that all work done on these 141 wells cost an average of \$500 per well, the total would be approximately \$70,000. Comparing the cost of cementing the wells with the increased production discloses the enormous profit to the operator from this method of excluding water from producing wells. Besides the increase in production, practically all operators inform us that there has been a very material saving in the amount of labor required after the wells were cemented. Before cementing was done, it required approximately 1.7 men per well, but since the water was excluded, it requires less than one man per well. There is also a great saving in equipment, because of the fact that wells producing a large amount of water deteriorate more rapidly than those wells pumping only oil.

Besides the work done in the Cushing field, considerable preliminary work was done in the Healdton field and in other localities in the

State to secure cooperation of various oil operators and get them started in the use of cement. Work of this character was done in the Billings field, Stone Bluff field, Kiowa Reservation, and Pawnee Reservation.

There has been less difficulty in securing records of operators during the year than any previous year, due to the present spirit of cooperation. There have been no cases this year where it was necessary to inflict a fine or other penalty because of noncompliance with the regulations.

The use of mud fluid has become so general that the plugging of wells does not cause the trouble and discussion it did when old methods were used. Of the 252 wells on which we received plugging affidavits, there is not a known case where the mud fluid method failed to produce the desired results, and furthermore, this office does not know of any case in Oklahoma where mud fluid, when properly used, has failed to produce a first-class plugging job. Attention is called to this fact because there is not one other practice so dangerous to the life of a field, or a group of wells, as improper plugging, and as the method which we have advocated has proven both to be cheaper and more satisfactory than old methods, there is little likelihood that the producers will abandon it, or that there will be any difficulty in the future in securing the adoption of the method in other localities where it is not used at present.

REPORTS RECEIVED DURING THE FISCAL YEAR.

Notification to drill.....	378
Notification to deepen.....	10
Notification to plug.....	238
Plugging records.....	252
Final logs of completed wells.....	574
Letters sent out.....	1, 163

In the above tabulation it will be noted that there were 574 logs received. This includes logs of wells drilled in the Pawnee Reservation as well as the Five Civilized Tribes. According to the logs received, there were 493 wells drilled in the Five Civilized Tribes, of which there were 364 producing wells and 129 dry holes. By comparison, there has been a considerable decrease in the number of wells drilled in the Five Civilized Tribes, as well as a decrease in the number of dry holes drilled, over last year. These statistics indicate, as predicted in the report for the fiscal year 1918, a gradual decline in the development. Therefore it is important not only to supervise new development, but also wells already producing, in order to keep the production up to the highest possible and to lengthen the life of the field.

PROBATE.

Authority to appoint probate attorneys is found in the act of Congress approved May 27, 1908 (35 Stat., 312). These attorneys are under the direct supervision of the Commissioner of Indian Affairs. Former reports show the general scope of the work of these officers relating to and affecting the estates of minor and incompetent allottees under guardianship and the estates of deceased allottees under administration proceedings.

The act of Congress of May 25, 1918 (Public, No. 159, 65th Cong.), restricts probate attorneys to restricted allottees and their heirs.

Under provisions of the act of Congress approved June 14, 1918 (Public, No. 172, 65th Cong.), for the determination of heirship and for the partition of lands of full-blood heirs of allottees of the Five Civilized Tribes, the appearance of probate attorneys is necessary for the purpose of aiding the court to properly declare the heirship, and to take all necessary steps to prevent a declaration of heirship to illegal claimants. In partition proceedings the probate attorney must appear in district court and take such action as may be proper for the protection of the individual heirs.

The conservation of many hundreds of estates of Indian minors and full-blood heirs fully justifies the importance and necessity for the services of probate attorneys.

LAW AND ORDER.

Federal officers have been vigilant in their efforts to prevent the introduction of liquor from outside points into eastern Oklahoma. As a general rule, local officials are doing their duty in looking after the situation within their jurisdictions. The majority of field men report that most cases of drunkenness among Indians are caused by Choctaw beer, which is made easily and cheaply, and patent medicines, having a large percentage of alcohol, which can be bought at drug stores and small country stores. Also, in the mountainous portions of the State, there are many distilleries operating in violation of the law. Their suppression is difficult because of the sparsely settled communities and the ease with which the plants can be operated without detection. Indians are seldom violators of the law in the manufacture or sale of liquor. Peyote is not used by Indians of the Five Civilized Tribes and I have had no opportunity to observe its effects.

SUMMARY OF RECENT LEGISLATION ENACTED BY CONGRESS AND DECISIONS RENDERED BY THE STATE AND FEDERAL COURTS AFFECTING CITIZENS OF THE FIVE CIVILIZED TRIBES AND THEIR ESTATES.

LEGISLATION

Section 2 of the act of Congress approved June 14, 1918 (Public, No. 172), reads as follows:

That the lands of full-blood members of any of the Five Civilized Tribes are hereby made subject to the laws of the State of Oklahoma, providing for the partition of real estate. Any land allotted in such proceedings to a full-blood Indian, or conveyed to him upon his election to take the same at the appraisement, shall remain subject to all restrictions upon alienation and taxation obtaining prior to such partition. In case of a sale under any decree or partition the conveyance thereunder shall operate to relieve the land described of all restrictions of every character.

This legislation was prompted, no doubt, by a decision of the Supreme Court of the State of Oklahoma in the case of *Coleman v. Battiest* (162 Pac., 786), rendered December 19, 1916, wherein the court held that district courts of Oklahoma were without jurisdiction to order and decree the partition of lands inherited by full-blood Indians of the Five Civilized Tribes from a deceased allottee. The object of this legislation is to effect a partition of lands inherited by full-blood Indian heirs; and if the commissioners appointed by

the court to make partition report that the land can not be partitioned, same is appraised and sold, the effect of which may divest the Indian heir of his proportionate share therein against his will, and for a consideration, in most cases, wholly inadequate, when by referring to the laws of Oklahoma governing partition we find that the court shall tax the costs, attorney's fees, and expenses which may accrue in the action and apportion the same among the parties according to their respective interests.

Suits for the partition of lands are usually brought in the district courts, and this may be done without any notice whatever to the United States probate attorneys, thus depriving some of the heirs, possibly, from obtaining the advice and counsel of representatives of the department. The discretionary power of the court in taxing as costs attorneys' fees might, if misused, prejudice the rights or property interests of the full-blood Indian heirs. The section above quoted opens another avenue whereby the full-blood Indian heir may be divested of his inheritance without the counsel and advice of the Federal Government.

COURT DECISIONS.

IN RE TAXATION OF LANDS PURCHASED WITH RESTRICTED FUNDS.

The question whether lands theretofore taxable purchased with restricted funds, by deed made on Carney-Lacher form are exempt from State taxation, is one now intensely important as affecting the administrative policy of the office in its supervision over the lands so purchased. Moneys disbursed by this office in the purchase of lands for restricted Indians may be placed in three classes only, to wit: Land sale money, money accruing from oil and gas royalties under departmental leases, and money in lieu of an allotment.

Land sale moneys are derived from the sale of restricted allottees' allotments, and the only law we have touching this class of money is found in section 1 of the act of May 27, 1908 (35 Stat., 312), reading as follows:

* * * that the Secretary of the Interior may remove such restrictions, wholly or in part, under such rules and regulations concerning *terms of sale and disposal of proceeds* for the benefit of the respective Indians *as he may prescribe*.

The Circuit Court of Appeals, Eighth Circuit, in the case of *United States v. Law* (250 Fed., 218), having under consideration the language of said section 1 just above quoted, said:

* * * we conclude that the restrictions imposed by the Secretary of the Interior upon the alienation of the new lands purchased for Amanda Perry were in furtherance of the policy of Congress in protecting and caring for her as a ward of the Government, were within the authority granted by said section 1, and were valid and enforceable.

The court said further:

In the case at bar there are in act involved (sec. 1 of the act of May 27, 1908, 35 Stat. 312), words which clearly indicate a purpose to extend governmental control to property in which the proceeds of released lands may be invested.

So it is clear, under this decision, that lands purchased with land-sale moneys may be impressed with restrictions as to alienation; but the question whether such lands so purchased are exempt from taxation was not passed on by the court, thereby leaving that question now undecided.

As to moneys (royalties) accruing under departmental leases, we find no express statute law governing the disposition of such. The supreme court of our State, in a recent opinion in the case of *Ella Jones v. C. S. Whitlow* as county treasurer of McIntosh County, Okla., in passing on the question whether lands theretofore taxable, purchased with royalty funds, are exempt from State taxation by reason of a clause in the deed making the lands inalienable, held that such lands were not so exempt, the syllabus of said decision reading as follows:

Lands, theretofore taxable, purchased from private owners with royalties accruing to a full-blood Creek Indian from her restricted allotment, are not exempt from State taxation by a clause in the deeds from the grantor making the lands inalienable without the consent of the Secretary of the Interior.

Unless this decision is reversed, it must follow that all lands purchased with royalty funds must bear their proportion of State, county, and other taxes, the same as unrestricted lands. The same observations just made, relative to lands purchased with restricted royalty funds, are alike applicable to lands purchased with restricted moneys in lieu of allotments.

Speaking in a general way, tax exemption and nonalienability are two separate and distinct subjects, and it might follow that land restricted as to alienation under the decision of the circuit court of appeals, *United States v. Law*, supra, may not be exempt from taxation if it should appear that such land had theretofore been subject to the jurisdiction of the taxing powers of the State, having in mind section 3 of Article IV of the Constitution of the United States, which reads in part as follows:

* * * nothing in this Constitution shall be so construed as to prejudice any claims of the United States, or of any particular State.

I am advised that by request of the Interior Department, the Department of Justice has directed that a suit be brought in the Federal court at Muskogee, Okla., having in view a final determination of this question, but in the meantime, payment of taxes assessed against lands purchased with funds in the control of this office, whether land sale, royalties, or moneys in lieu of allotments, should be made so far as funds available will permit.

TOOTIE RILEY CASE.

Section 9 of the act of Congress approved May 27, 1908 (35 Stat., 312), reads in part as follows:

That if any member of the Five Civilized Tribes of one-half or more Indian blood shall die, leaving issue surviving, born since March fourth, nineteen hundred and six, the homestead of such deceased allottee shall remain inalienable, unless restrictions against alienation are removed therefrom by the Secretary of the Interior in the manner provided in section one hereof, for the use and support of such issue during their life or lives, until April twenty-six, nineteen hundred and thirty-one.

Emma Derrisaw, an adult full-blood Creek, was allotted 160 acres of land of the Creek Nation, of which 40 acres were designated as her homestead allotment. On April 24, 1902, there was born to said Emma Derrisaw a child, Tootie Riley, who was afterwards enrolled and given an allotment. In July, 1905, Emma Derrisaw and one Doc Willingham intermarried, and as a result of this marriage, Julia

Willingham was born on February 11, 1907, too late to be enrolled and receive an allotment. In November, 1908, Emma Derrisaw Willingham died intestate, leaving surviving her Doc Willingham, her husband, and Tootie Riley and Julia Willingham, her children. As Julia Willingham was born subsequent to March 4, 1906, the right of possession and occupancy of the homestead allotment of her deceased mother for her use and support until April 26, 1931, is vested in her by the terms of section 9 above quoted. Upon the death of Emma Derrisaw Willingham, the title to her homestead allotment, subject to the rights of Julia Willingham, vested in Doc Willingham, Tootie Riley, and Julia Willingham, in fee, in equal shares.

On October 3, 1912, Tootie Riley and Julia Willingham, minors, by their respective guardians and Doc Willingham, the sole heirs of Emma Derrisaw Willingham, deceased, made an oil and gas mining lease covering the 40 acres of land allotted as homestead to Emma Derrisaw Willingham, which lease was in due time approved by the Secretary of the Interior. Oil was found in the land covered by this lease and the royalties provided for have been and are being paid by the lessee into the office of the Superintendent for the Five Civilized tribes and there held in trust for the use and benefit of the lessors, according to their respective interests. The question as to whom and in what amounts these royalties should be distributed has now been finally determined by the Supreme Court of the United States in the case of Gabe E. Parker, superintendent, et al., v. Tootie Riley, a minor, et al., decided May 19, 1919, wherein the court held that Julia Willingham is entitled to the use of the royalties—that is to say, the interest or income which may be obtained by properly investing them during a period not beyond April 26, 1931, leaving the principal, like the land, to go to the heirs in general on the termination of her special right.

EASTMAN RICHARD CASE.

Samuel Richard, a minor full-blood Creek Indian, was given an allotment of 160 acres of the lands of the Creek Nation, and on April 13, 1912, acting through his guardian, he executed an oil and gas mining lease covering his allotment, which lease was approved by the probate court and later by the Secretary of the Interior under rules and regulations prescribed by him. On January 24, 1916, and while yet a minor, Samuel Richard died, leaving as his sole heir his father, Eastman Richard, a full-blood Creek Indian, who was afterwards appointed one of the two coadministrators of the estate of said Samuel Richard, deceased. The lease above referred to provides for the payment to the superintendent for the Five Civilized Tribes, for the use and benefit of the lessor, of a royalty on the proceeds of oil and gas obtained from the land. The owners of the lease have extracted large quantities of oil from the land, both before and after the death of the lessor, and have paid the superintendent as royalties approximately \$382,000, the greater part of which was paid during the lifetime of the lessor. Suit was brought by these administrators against the superintendent and cashier for the Five Civilized Tribes to recover this money and to restrain them from collecting royalties further under the lease.

Section 9 of the act of Congress approved May 27, 1908 (35 Stat., 312), reads in part as follows:

That the death of any allottee of the Five Civilized Tribes shall operate to remove all restrictions upon the alienation of said allottee's land; provided that no conveyance of any interest of any full-blood Indian heir in such land shall be valid unless approved by the court having jurisdiction of the settlement of the estate of said deceased allottee.

The questions presented by the suit brought by the administrators of the estate of Samuel Richards, deceased, were whether the land covered by the lease, following the death of Samuel Richard, the allottee, became unrestricted, and whether the supervisory authority of the Secretary of the Interior over the collection, care, and distribution of the royalties accrued and accruing from said land had terminated. On June 2, 1919, the Supreme Court of the United States, on appeal, rendered its decision covering the questions in issue in the case of Gabe E. Parker, superintendent, et al., v. Eastman Richard and R. D. Martin, coadministrators, etc., wherein the court held that the land covered by the lease was then and would remain restricted land until April 26, 1931, unless prior to that time the heir, with the approval of the proper county court, saw fit to convey his interest therein to another, and that the authority of the Secretary of the Interior to supervise the collection, care, and disbursement of the royalties had not terminated.

This decision seems to make clear that oil and gas mining leases covering lands inherited by full-blood Indian heirs, whether such leases be executed prior or subsequent to the death of the allottee, and the royalties accruing thereunder, are subject to the supervisory authority of the Secretary of the Interior during the time such lands remain restricted.

HEALTH.

Health conditions among the Indians of the Five Civilized Tribes continue as in my previous reports, except no doubt, many diseases which might have been arrested have eaten deeper into those afflicted and spread to others. No additional facilities have been provided, notwithstanding my urgent recommendations for sanatoria, physicians, and nurses.

Dr. Walter S. Stevens, special physician, Indian Office, spent from February 21, 1919, to June 10, 1919, among the Seminoles. A résumé of his report shows the following:

Number of Indians, exclusive of freedmen (Seminole County).....	2, 141
Number of persons examined by special physician.....	989
Number of cases reported on information.....	384
Number of cases of trachoma found, all stages.....	376
Number of cases conjunctivitis, not included above.....	121
Total blindness.....	2
Blind in one eye.....	10
Corneal ulcer, active.....	16
Pterygium.....	21
Errors in refraction.....	18
Tuberculosis, all forms (physical examination only).....	41
Rheumatism.....	84
Chronic malaria.....	90

It is reasonable and quite certain that the situation in the other tribes is relatively about as reported by Dr. Stevens as to the Seminoles.

Reports from field men show the following with reference to the epidemic of Spanish influenza approximately from October 1, 1918, to March 1, 1919:

Age divisions.	Cases.	Deaths.
Minors.....	4,057	230
Adults.....	6,933	406
Total.....	10,990	636

The death rate shown above, while probably not greater than among whites, could no doubt have been materially reduced had the services of a well-equipped health organization been available.

As stated in a former report, the health problem resolves itself primarily into an educational campaign, for ignorance and indifference are largely responsible for the spread of contagious and infectious diseases. This campaign should be carried on by a permanent organization of competent and well-equipped doctors and field matrons working in cooperation with the field employees. In addition, special hospital facilities should be provided for the Cherokees, Creeks, and Seminoles.

EDUCATION.

The education of children of the Five Civilized Tribes is under the immediate supervision of Mr. A. S. Wyly, supervisor. Tribal and nonreservation Government schools usually are filled to capacity. There are no day schools exclusively for Indians, but there are 2,377 school districts in eastern Oklahoma, and in most instances, Indian children live within reasonable distances from public schools, although in some localities where there is considerable nontaxed Indian land, school facilities are not always convenient. In many homes the parents do not speak the English language, consequently their children are handicapped in their school work. My field men report a gratifying percentage of Indian children enrolled in neighborhood schools, but the regularity of attendance is not as good as it should be. It is desirable that liberal congressional appropriations be made for several years to aid the schools in eastern Oklahoma, else many children living in communities having large areas of non-taxed land will be without educational facilities. For details, see Supervisor Wyly's report.

NEEDED LEGISLATION.

TRIBAL AFFAIRS.

1. For the survey of the boundary line between the State of Texas and the Choctaw and Chickasaw Nations along the Red River.
2. For the distribution of Choctaw, Chickasaw, Creek, and Seminole tribal funds on deposit and as they accumulate.
3. An appropriation of \$8,000 to index and properly preserve tribal records.

INDIVIDUAL INDIANS.

1. An appropriation of \$205,000 for the administration of the affairs of the Five Civilized Tribes.
2. An appropriation of \$5,000 to copy in book form Creek census cards.
3. An appropriation of \$200,000 for the aid of common schools in eastern Oklahoma for the fiscal year 1921.
4. Provision for sanatoria, treating stations, physicians, and nurses, conveniently located, for the treatment and prevention of diseases.
5. Repeal of the law which authorizes restricted lands to be leased for agricultural purposes without Federal supervision.
6. Repeal of the law which provides that restricted lands shall become unrestricted immediately upon the death of the allottee.
7. Repeal of the law which authorizes the execution of valid wills disposing of restricted property without departmental approval.
8. Provision for a Federal board of guardianship and administration of estates of minors and heirs to coordinate with the Federal Land Loan Board.

CONCLUSION.

I recommend immediate and ample appropriations for health facilities and for farmers and field matrons. Health and industry are indispensable to competency, happiness, and good citizenship.

I urge the appropriation of \$205,000 for the administration of the affairs of the Five Civilized Tribes. Considering the volume of necessary work, the increased cost of labor, materials, and expenses \$185,000 is inadequate to support the character and scope of administration needed. To prevent a deficit of \$20,000 during this year furloughs and curtailments of activities had to be effected for the months of April, May, and June. Justifications in detail will be submitted at the proper time.

Respectfully,

GABE E. PARKER,
Superintendent for the Five Civilized Tribes.

The honorable the COMMISSIONER OF INDIAN AFFAIRS.

ANNUAL REPORT OF THE SUPERVISOR OF INDIAN SCHOOLS, FIVE CIVILIZED TRIBES.

OFFICE SUPERVISOR OF SCHOOLS,
FIVE CIVILIZED TRIBES,
Muskogee, Okla., July 24, 1919.

There is submitted herewith my annual report as supervisor of Indian schools of the Five Civilized Tribes for the fiscal year ended June 30, 1919.

BOARDING SCHOOLS.

Nine of the ten Indian boarding schools in this jurisdiction are maintained from tribal funds, the plants being owned by the Choctaw, Chickasaw, Creek, and Seminole Nations. The Cherokee Orphan Training School is a Government institution and is supported by congressional appropriation. Four of the schools enroll girls only, three boys exclusively, and three are coeducational.

Superintendents endeavor to give preference in enrollment to children having a large degree of Indian blood who do not have good school facilities near their homes, but at the tribal schools this is not always practicable. Indian parents without regard to degree of blood are interested in tribal funds and usually the mixed bloods are more prompt to take advantage of the opportunities afforded by the boarding schools, but notwithstanding there were 1,111 restricted children of the 1,370 enrolled, or slightly more than 81 per cent of the total enrollment. The enrollment at the Cherokee school is limited by an act of Congress to orphan children of restricted Indian parents.

The schools were visited frequently during the year and two reports of inspection were made on each.

EMPLOYEES.

There were five changes in superintendents during the year. Supt. Farver, of Armstrong Academy, resigned in August, 1918, to enter the Army, and Special Supervisor E. A. Porter was detailed to Armstrong and remained in charge until March, 1919, when the former superintendent was reinstated. Supt. Ransom, of the Cherokee School, resigned soon after the opening of the term and Mr. James P. Ryder, principal of the Sisseton Indian School, South Dakota, was appointed superintendent. Supt. Clark, of Nuyaka, was transferred to the Phoenix Indian School as chief clerk, and Mr. Jack Brown, who was formerly principal teacher at Nuyaka for three years, succeeded him. Supt. Dilbeck, of Tuskahoma, was transferred to Euchee to fill the vacancy caused by the resignation of Supt. Batson, and Miss Amanda Eld, principal at Tuskahoma for the past 14 years, was promoted to the superintendency of that school.

There were not as many changes in subordinate positions as last year, and with few exceptions employees have rendered faithful, conscientious service. The superintendents have cooperated in maintaining a good standard of efficiency and generally speaking the social relations among employees have been harmonious, and they have shown a spirit of earnest, helpful cooperation.

HEALTH AND SANITATION.

None of the boarding schools escaped the epidemic of influenza which swept over the country last fall, and, all told, more than 700 cases were reported by superintendents. At Jones Academy the epidemic was especially virulent; 51 cases of pneumonia developed, followed by 6 deaths. There were 5 deaths at other schools, 11 altogether, which is a small number for the cases involved, considering the fatalities from the epidemic over the country.

Under authority from the Indian Office, some of the schools employed special physicians and nurses, and in practically all of them school work was entirely suspended for a time, the employees who were not ill themselves assisting in caring for the sick. Aside from this epidemic, the health of pupils was exceptionally good and no deaths resulted from other causes.

A field dentist visited two of the schools just before the close of the year and a special physician was at Mekusukey Academy in connection with his work among the Seminole Indians, but with these exceptions the schools have not been visited by a dentist and special physician for the past two years. The services of a dentist and a special physician could be profitably employed at the other schools during the ensuing year.

There are no indoor gymnasiums, but playground apparatus is provided for each school, and in this climate, with the exception of a few days in the winter months, children play out of doors. The ordinary health rules are well observed, and sleeping apartments are well ventilated and lighted and the premises and buildings are kept in a sanitary condition.

IMPROVEMENTS.

Extensive new improvements have not been made at any of the schools with the exception of Bloomfield Seminary, where a heating plant was installed and a laundry equipped with modern machinery was built. A lavatory annex to the girls' dormitory, which provides additional bathing facilities, was completed at Cherokee, and just before the end of the fiscal year contracts were let for the construction of a shop building, dairy barn, and for wiring the buildings for electric lights at this school. Contracts were also awarded for a laundry building at Eufaula and for installing a heating plant at Wheelock.

At Jones, Mekusukey, and Euchee the school barns were burned, but after a careful investigation of each case, it is not believed the fires were of an incendiary origin. The farmer's cottage at Tusahoma also burned and the fire probably originated from defective wiring. The losses were partially covered by insurance and the full amounts of the policies were collected. New barns were built at Euchee and Jones, but there were not sufficient funds to rebuild at Mekusukey.

The original buildings of the tribal schools are old and have been occupied a long time and much repair work is required each year to keep the plants in good condition. At some of the schools the allotments in recent years have not been sufficient to properly maintain them and make all of the necessary repairs, to say nothing of providing for new improvements.

PUBLIC SCHOOLS.

The appropriation of \$250,000, provided for in the Indian bill approved May 25, 1918, for aid of common schools in the Five Tribes and Quapaw Agency, in Oklahoma, was distributed in accordance with departmental regulations approved August 23, 1918, as follows:

Tuition at the rate of 10 cents a day for the actual attendance of Indian children of school age was paid to 1,218 districts from which attendance reports were received. Those districts in which incorporated towns were located received tuition for the attendance of only those Indian children who lived in the districts outside of the corporate limits. The total amount of tuition paid was \$93,978.40.

Rural districts where a tax of 5 or more mills was levied, received half of the amounts required in excess of a 5-mill levy to maintain an 8-months term, provided such districts increased their levies sufficiently to pay the balance of the required amounts. These payments were based upon the salaries of teachers, and \$83,939.77 was paid to 502 districts.

A final or per capita payment of 25 cents, based upon the total enumeration of all children of school age, was made to all districts outside of incorporated towns and cities, amounting to \$55,809.75. In this payment 2,172 districts participated. The total amount disbursed was \$233,727.92.

The statements herewith give information concerning the enumeration and enrollment of Indian children in the public schools and the enrollment of Five Tribes pupils at contract, nonreservation, and tribal boarding schools.

Respectfully submitted.

A. S. WYLY, *Supervisor.*

The COMMISSIONER OF INDIAN AFFAIRS.

Statistics of tribal boarding schools.

	Total enrollment.	Number full bloods.	Number other restricted.	Number unrestricted.	Number full blood and other restricted pupils completing course of study.	Total number completing course of study.	Average attendance.
Cherokee Nation:							
Cherokee Orphan Training School.	156	107	49	.....	6	6	100
Chickasaw Nation:							
Bloomfield Seminary	90	26	19	45	.....	.....	61
Choctaw Nation:							
Armstrong Male Orphan Academy.	140	89	14	37	1	2	74
Jones Male Academy	143	63	52	28	3	3	91
Tuskahoma Female Orphan Academy	137	30	44	63	4	6	103
Wheelock Female Orphan Academy	132	70	15	47	2	3	86
Creek Nation:							
Euclaw Boarding School	159	116	24	19	3	4	101
Eufaula Boarding School	131	84	36	11	10	11	110
Nuyaka Boarding School	131	101	26	4	8	9	89
Seminole Nation:							
Mekuskey Academy	151	110	36	5	2	2	86
Total	1,370	796	315	259	39	46	901

Statistics of tribal boarding schools—Continued.

	Permanent improve- ments and repairs.	Cost of main- tenance.	Total annual expendi- ture.	Amount of sundry receipts collected.	Total ex- penditure of tribal and con- gressional funds.
Cherokee Nation:					
Cherokee Orphan Training School.....	\$4,787.92	\$27,355.90	\$32,143.82	\$1,123.08	\$31,020.74
Chickasaw Nation:					
Bloomfield Seminary.....	15,273.73	18,473.93	33,847.66	1,655.54	32,192.12
Choctaw Nation:					
Armstrong Male Orphan Academy.....	2,473.85	21,778.76	24,252.61	1,898.37	22,354.24
Jones Male Academy.....	4,422.41	16,728.05	21,150.46	3,521.11	17,629.35
Tuskahoma Female Orphan Academy.....	938.00	28,800.53	29,738.53	2,953.41	26,785.12
Wheelock Female Orphan Academy.....	471.76	23,330.15	23,801.91	2,926.11	20,875.80
Creek Nation:					
Euchaee Boarding School.....	2,447.69	23,010.80	25,458.49	1,208.64	24,249.85
Eufaula Boarding School.....	624.78	20,515.41	21,140.17	1,920.66	19,219.51
Nuyaka Boarding School.....	184.20	22,952.07	23,136.27	1,071.82	22,064.45
Seminole Nation:					
Mekusukey Academy.....	2,682.76	22,254.19	24,936.95	1,756.17	23,181.78
Total.....	34,407.08	225,190.79	259,606.87	20,035.91	239,570.96

Enrollment of Five Tribes pupils in nonreservation Indian schools.

	Chero- kee.	Chicka- saw.	Choctaw.	Creek.	Semi- nole.	Total.
Cheyenne and Arapaho School:						
Full blood.....	53	15	2	8		78
Other restricted.....	20	4		2		26
Unrestricted.....						
	73	19	2	10		104
Chilocco Training School:						
Full blood.....	97	12	49	46	13	217
Other restricted.....	51	12	17	23		103
Unrestricted.....	3		1	1		5
	151	24	67	70	13	325
Haskell Institute:						
Full blood.....	40	6	36	68	3	153
Other restricted.....	67	4	26	19	3	119
Unrestricted.....	7	1	10	3		21
	114	11	72	90	6	293
Seneca Indian School:						
Full blood.....	121					121
Other restricted.....	14					14
Unrestricted.....	5					5
	140					140
Enrollment by tribes.....	478	54	141	170	19	862

Total enrollment of full-blood Indian pupils..... 569
 Total enrollment of other restricted Indian pupils..... 262
 Total enrollment of unrestricted Indian pupils..... 31

862

Boarding schools.¹

School.	Post-office address.	Telegraphic address.	Telephone connection.	Railroad station.
Armstrong Male Academy.	Academy....	Bokchito....	Rural line to Bokchito.	Bokchito; 4 miles to school by private conveyance.
Jones Male Academy....	Hartshorne..	Hartshorne..	Rural line to Hartshorne.	Hartshorne; 4 miles to school by private conveyance.
Wheelock Female Academy.	Millerton....	Millerton....	Private line to Millerton.	Millerton; 1½ miles to school by private conveyance.
Tuskahoma Female Academy.	Tuskahoma..	Tuskahoma..	Private line to Tuskahoma.	Tuskahoma; 4 miles to school by private conveyance.
Bloomfield Seminary....	Ardmore....	Ardmore....	With regular telephone line.	Ardmore; 2 miles from depot.
Cherokee Orphan Training School.	Tahlequah..	Tahlequah..	Government line to Tahlequah.	Park Hill; 3 miles to school by private conveyance.
Eufaula Boarding School.	Eufaula.....	Eufaula.....	With regular telephone line.	Eufaula; 1 mile from depot.
Euchee Boarding School.	Sapulpa.....	Sapulpa.....	With regular telephone line.	Sapulpa; 1 mile from depot.
Nuyaka Boarding School.	Nuyaka.....	Okmulgee....	Rural line to Okmulgee.	Beggs; 12 miles to school by private conveyance.
Mekuskey Academy....	Seminole....	Seminole....	Government line to Seminole.	Seminole; 5 miles to school by private conveyance.

¹ All schools are in Oklahoma.*Statistics of contract schools.*

School.	Full blood.	Other restricted.	Unrestricted.	Total.	Average attendance.	Amount paid.
Oklahoma Presbyterian College for Girls, Durant:						
Choctaw.....	1	4	24	29	25.6	\$2,688.37
Chickasaw.....			17	17	14.9	1,532.03
Murray State School of Agriculture, Tishomingo:						
Choctaw.....	1	1	20	22	18	2,082.10
Chickasaw.....		12	21	33	29.5	3,366.64
Old Goodland Indian Industrial School, Hugo:						
Choctaw.....	74	10	4	88	76.9	9,210.67
El Meta Bond College, Minco:						
Choctaw.....			12	12	10.2	1,064.71
Chickasaw.....	2	7	21	30	18.5	2,060.70
St. Agnes Mission, Antlers:						
Choctaw.....	29	8	18	55	46.4	4,860.00
St. Agnes Academy, Ardmore:						
Choctaw.....	23	14	36	73	59.8	6,409.98
Chickasaw.....	14	23	23	60	44.5	4,813.45
St. Joseph's School, Chickasha:						
Choctaw.....			14	14	13.2	1,380.41
Chickasaw.....			8	8	6.4	623.78
St. Elizabeth's School, Purcell:						
Choctaw.....	9	12	13	34	29.2	3,153.02
Chickasaw.....		9	26	35	29.4	3,174.32
Choctaw.....	137	49	141	327	279.3	30,849.26
Chickasaw.....	16	51	116	183	143.2	15,570.92
Total.....	153	100	257	510	422.5	46,420.18

Scholastic enumeration and distribution of \$250,000 appropriation in aid of common schools among the Five Civilized Tribes, and Quapaw Agency, Okla., fiscal year ended June 30, 1919.

No.	County.	Total enumeration school children, all districts.					Number restricted Indian children.	Number ineligible Indian children.	Indian children in districts receiving no payments.	Number restricted class in public schools.	Number unrestricted class in public schools.	Number districts receiving payments.
		Number of districts.	Whites.	Indians.	Negroes.	Total.						
1	2	3	4	5	6	7	8	9	10	11	12	13
CHEROKEE NATION.												
1	Adair.....	40	3,226	1,720	.....	4,946	639	4	.....	416	726	40
2	Cherokee.....	80	4,983	1,751	308	7,042	515	4	.....	369	896	80
3	Craig.....	74	4,529	1,453	308	6,295	127	1	.....	88	957	74
4	Delaware.....	75	3,502	1,457	2	4,961	437	.....	.....	296	735	75
5	Mayes.....	67	4,090	1,335	225	5,650	227	.....	.....	178	811	67
6	Nowata.....	51	3,964	752	590	5,312	65	.....	41	48	488	51
7	Ottawa.....	50	11,600	998	.....	12,604	423	.....	128	301	354	45
8	Rogers.....	39	4,009	1,245	171	6,025	81	.....	.....	68	848	39
9	Sequoyah.....	69	7,437	1,510	942	9,889	341	2	.....	233	816	69
10	Washington.....	26	6,621	401	154	7,236	134	1	86	89	233	24
CHICKASAW NATION.												
11	Carter.....	67	12,101	212	1,720	14,063	100	.....	51	78	101	62
12	Garvin.....	72	10,020	414	695	11,129	62	.....	52	39	133	70
13	Grady.....	61	10,918	404	644	11,966	45	.....	.....	36	153	61
14	Jefferson.....	46	5,759	81	108	5,948	11	1	19	9	45	42
15	Johnston.....	55	6,730	394	235	7,359	156	.....	1	85	86	53
16	Love.....	35	4,640	149	328	5,117	46	.....	60	26	81	31
17	Marshall.....	42	5,169	333	124	5,626	108	.....	74	71	156	39
18	Murray.....	30	3,881	218	88	4,187	72	.....	3	49	114	28
19	McClain.....	65	6,640	237	256	7,133	30	.....	30	16	132	48
20	Pontotoc.....	58	10,653	343	355	11,351	148	.....	.....	108	132	66
21	Stephens.....	46	4,426	211	36	4,673	26	.....	.....	22	118	44
CHOCTAW NATION.												
22	Atoka.....	59	7,111	275	418	7,804	132	.....	54	95	117	56
23	Bryan.....	74	13,107	762	704	14,573	159	2	46	115	459	72
24	Choctaw.....	47	8,916	487	1,818	11,221	138	.....	44	86	160	44
25	Coal.....	47	5,983	262	220	6,465	75	.....	16	53	133	43
26	Haskell.....	56	7,100	380	109	7,588	141	.....	63	102	153	54
27	Latimer.....	40	4,928	191	218	5,347	98	1	18	67	111	28
28	Le Flore.....	107	14,148	698	764	15,610	190	.....	83	123	236	101
29	McCurtain.....	85	10,872	726	2,248	13,846	428	.....	26	277	177	83
30	Pittsburg.....	110	16,105	764	1,136	18,005	198	.....	19	118	493	108
31	Pushmataha.....	64	5,561	398	118	6,072	175	1	.....	76	120	64
CREEK NATION.												
32	Creek.....	74	16,172	198	2,053	18,423	95	.....	56	60	39	65
33	Hughes.....	70	8,669	383	741	9,783	225	.....	56	153	122	67
34	Muskogee.....	79	13,502	1,368	4,994	19,864	185	.....	253	141	776	74
35	McIntosh.....	66	6,465	979	2,194	9,638	409	.....	.....	287	297	65
36	Okfuskee.....	49	5,635	292	3,363	9,290	168	2	40	117	65	45
37	Okmulgee.....	50	12,383	275	3,280	15,938	147	.....	12	95	81	44
38	Tulsa.....	41	23,449	788	2,138	26,375	117	.....	.....	85	290	37
39	Wagoner.....	65	4,331	365	2,502	7,248	87	.....	2	60	194	61
SEMINOLE NATION.												
40	Seminole.....	54	6,870	325	1,733	8,928	283	.....	9	101	16	51
Total.....		2,377	326,921	25,633	38,046	390,600	7,274	19	1,340	4,839	12,057	227

Scholastic enumeration and distribution of \$250,000 appropriation in aid of common schools among the Five Civilized Tribes, and Quapaw Agency, Okla., fiscal year ended June 30, 1919—Continued.

No.	County.	Districts assisted by Government—rural districts.								
		Scholastic enumeration.					Payments.			
		Number of districts.	Indians.	Whites.	Negroes.	Total.	Tuition.	Minority.	Additional.	Total.
1	2	14	15	16	17	18	19	20	21	22
CHEROKEE NATION.										
1	Adair.....	37	1,441	2,042	.....	3,483	\$5,804.30	.....	\$1,862.26	\$7,666.56
2	Cherokee.....	78	1,502	4,298	245	6,045	5,871.40	.....	4,037.15	9,908.55
3	Craig.....	70	1,097	2,805	185	4,087	4,967.70	.....	1,499.37	6,467.07
4	Delaware.....	71	1,270	2,892	2	4,164	4,573.00	.....	3,657.97	8,230.97
5	Mayes.....	62	980	2,882	225	4,087	5,142.50	\$26.43	1,318.85	6,487.78
6	Nowata.....	47	543	2,078	284	2,905	2,840.10	.....	728.75	3,568.85
7	Ottawa.....	42	663	2,484	.....	3,147	2,820.50	.....	1,477.68	4,298.18
8	Rogers.....	33	750	2,215	52	3,017	2,782.80	.....	741.25	3,524.05
9	Sequoyah.....	62	1,116	5,376	660	7,152	4,641.70	.....	3,339.78	7,981.48
10	Washington.....	20	214	1,435	18	1,667	976.90	.....	416.75	1,393.65
CHICKASAW NATION.										
11	Carter.....	62	191	5,893	1,086	7,170	825.30	49.35	2,047.51	2,922.16
12	Garvin.....	67	308	6,991	420	7,719	547.40	75.83	3,558.86	4,182.09
13	Grady.....	58	355	7,662	84	8,101	1,361.80	.....	5,843.48	7,205.28
14	Jefferson.....	40	58	3,659	40	3,757	253.60	.....	2,041.67	2,295.27
15	Johnston.....	50	331	4,649	139	5,119	644.60	12.97	2,901.81	3,568.88
16	Love.....	31	89	3,298	209	3,656	471.80	.....	5,745.71	6,217.51
17	Marshall.....	39	259	3,854	74	4,187	839.50	.....	2,760.87	3,600.37
18	Murray.....	25	132	2,044	13	2,189	688.30	.....	2,529.10	2,967.40
19	McClain.....	46	180	4,876	158	5,220	839.40	.....	1,561.75	2,401.15
20	Pontotoc.....	60	255	6,594	193	7,042	917.60	103.57	6,385.35	7,406.52
21	Stephens.....	43	171	1,726	.....	1,897	830.50	.....	8,864.88	9,194.88
CROCTAW NATION.										
22	Atoka.....	56	221	6,232	226	6,679	788.50	.....	3,721.89	4,510.39
23	Bryan.....	65	493	8,544	648	9,685	2,573.50	145.99	4,399.10	7,118.59
24	Choctaw.....	42	369	5,474	1,385	7,228	1,442.70	126.96	5,101.91	6,671.57
25	Coal.....	43	246	4,135	91	4,472	1,209.30	84.17	3,694.56	4,888.03
26	Haskell.....	51	316	4,806	45	5,167	1,341.70	8.34	5,781.93	7,131.97
27	Latimer.....	38	183	3,903	162	4,248	154.60	54.29	2,283.27	2,474.16
28	LeFlore.....	93	543	11,976	624	13,143	1,546.60	.....	8,764.12	10,310.72
29	McCurtain.....	80	658	8,106	2,026	10,790	1,057.30	402.67	7,184.07	8,644.04
30	Pittsburg.....	100	589	9,006	451	10,046	1,992.40	249.12	6,982.55	9,224.07
31	Pushmataha.....	62	330	4,769	81	5,180	560.10	.....	2,939.49	3,499.59
CREEK NATION.										
32	Creek.....	65	142	5,102	1,436	6,680	290.70	.....	1,670.50	1,961.20
33	Hughes.....	64	327	6,413	526	7,266	902.50	318.43	8,195.86	9,416.79
34	Muskogee.....	67	964	3,855	1,606	6,425	3,231.40	66.04	1,915.38	5,212.82
35	McIntosh.....	62	699	5,564	1,557	7,820	1,757.40	76.50	3,177.87	5,011.86
36	Okfuskee.....	45	252	4,203	2,436	6,891	583.60	.....	1,774.73	2,358.33
37	Okmulgee.....	43	220	2,739	1,981	5,940	645.40	.....	1,989.45	2,634.85
38	Tulsa.....	31	550	2,966	440	3,966	747.40	.....	996.50	1,743.90
39	Wagoner.....	59	246	2,968	1,909	5,123	1,231.30	.....	1,777.73	3,009.03
SEMINOLE NATION.										
40	Seminole.....	49	292	5,544	1,352	7,188	419.40	96.31	2,999.75	3,515.46
Total.....		2,163	19,561	187,078	23,129	229,768	71,066.50	1,899.06	137,850.46	210,816.02

Scholastic enumeration and distribution of \$250,000 appropriation in aid of common schools among the Five Civilized Tribes, and Quapaw Agency, Okla., fiscal year ended June 30, 1919—Continued.

No.	County.	Districts assisted by Government—incorporated town districts.						
		Scholastic enumeration.				Payments.		
		Number of districts.	Indians.	Whites.	Ne-groes.	Total.	Tuition.	Total payment, all districts.
1	2	23	24	25	26	27	28	29
CHEROKEE NATION.								
1	Adair.....	3	294	1,184		1,478	\$1,854.60	\$9,521.16
2	Cherokee.....	2	249	685	63	997	179.70	10,088.25
3	Craig.....	4	361	1,724	123	2,208	1,240.30	7,707.37
4	Delaware.....	4	187	610		797	599.39	8,880.27
5	Mayes.....	5	355	1,208		1,563	1,716.70	8,204.48
6	Nowata.....	4	168	1,490	312	1,970	928.10	4,490.96
7	Ottawa.....	3	207	2,460		2,667	917.30	5,215.48
8	Rogers.....	6	495	2,394	119	3,008	2,949.30	6,473.35
9	Sequoyah.....	7	394	2,061	282	2,737	1,671.90	9,663.39
10	Washington.....	4	161	3,837	112	4,110	917.90	2,311.55
CHICKASAW NATION.								
11	Carter.....							2,922.16
12	Garvin.....	3	54	1,546	172	1,772	611.80	4,823.89
13	Grady.....	3	49	3,256	880	3,865	491.70	7,094.98
14	Jefferson.....	2	4	401		405	27.80	2,323.07
15	Johnston.....	3	63	843	96	1,001	423.60	3,982.48
16	Love.....							6,217.51
17	Marshall.....							3,600.37
18	Murray.....	3	83	1,669	75	1,827	328.60	3,296.69
19	McChain.....	2	21	1,154	87	1,268	66.20	2,467.35
20	Pontotoc.....	5	88	4,059	162	4,309	567.10	7,973.62
21	Stephens.....	1	40	1,144	36	1,220	48.20	9,243.08
CHOCTAW NATION.								
22	Atoka.....							4,510.39
23	Bryan.....	7	223	3,980	44	4,227	1,334.60	8,453.19
24	Choctaw.....	2	74	1,208	184	1,466	346.70	7,018.27
25	Coal.....							4,888.08
26	Haskell.....	3	59	1,563	1	1,623	411.70	7,543.67
27	Lattimer.....							2,474.16
28	Le Flore.....	3	72	827	72	971	335.60	10,646.33
29	McCurtain.....	3	42	1,353	120	1,525	472.60	9,116.64
30	Pittsburg.....	6	156	4,268	461	4,835	1,045.10	10,269.17
31	Pushmataha.....	2	63	792	37	892	397.60	3,966.59
CREEK NATION.								
32	Creek.....							1,961.20
33	Hughes.....	3	43	704		747	159.60	9,576.39
34	Muskogee.....	7	151	1,964	461	2,576	1,146.60	6,369.42
35	McIntosh.....	3	280	871	457	1,608	340.60	5,352.46
36	Oklfuskee.....							2,358.23
37	Okrmulgee.....	1	43	3,246	982	4,271	28.90	2,653.75
38	Tulsa.....	6	228	16,943	1,545	18,716	896.60	2,642.50
39	Wagoner.....	2	117	1,162	250	1,529	224.00	3,233.03
SEMINOLE NATION.								
40	Seminole.....	2	24	631	81	736	200.20	3,715.66
	Total.....	114	4,848	71,217	6,903	82,968	22,911.90	233,727.92

ANNUAL REPORT OF MINING TRUSTEES FOR CHOCTAW AND CHICKASAW NATIONS.

MUSKOGEE, OKLA., August 2, 1919.

HON. GABE E. PARKER,
Superintendent for the Five Civilized Tribes,
Muskogee, Okla.

DEAR SIR: We have the honor to respectfully submit our report for the fiscal year ended June 30, 1919.

The coal output this year, compared with that of the year ended June 30, 1918, shows a decrease of 429,100.18 tons.

There has been no asphalt production for this and the preceding year, and there does not seem to be any likelihood of further developments in the asphalt industry for years to come.

COAL AND ASPHALT LEASES.

The following statement gives the names of individuals and companies who have approved leases covering coal and asphalt lands in the Choctaw and Chickasaw Nations, Okla:

Coal leases.

Name of lessee.	Mines at or near—	Principal office.
Adamson Coal Co. ¹	Adamson, Okla.	McAlester, Okla.
Bache-Denman Coal Co.	Red Oak, Okla.	Fort Smith, Ark.
Bedwell, E. D., Coal Co.	Panama, Okla.	Do.
Bokoshe Smokeless Coal Co. ²	Bokoshe, Okla.	Bokoshe, Okla.
Craig Coal & Mining Co.	Craig, Okla.	McAlester, Okla.
Cameron Coal & Mining Co.	Williams, Okla.	Fort Smith, Ark.
Carbon Coal Co.	Carbon, Okla.	Carbon, Okla.
Coalgate Co.	Coalgate, Okla.	Coalgate, Okla.
Columbia Coal Co.	Poteau, Okla.	Poteau, Okla.
Cutts, Geo. T., trustee	Coalgate, Okla.	Parsons, Kans.
Central Coal & Lumber Co. ³	Carbon and Calhoun, Okla.	Keith & Perry Building, Kansas City, Mo.
Degnan-McConnell Coal Co.	Wilburton, Okla.	Wilburton, Okla.
Denison Coal Co.	Coalgate, Okla.	Denison, Tex.
Degnan-McConnell Coal & Coke Co.	Howe, Okla.	Fort Smith, Ark.
Eastern Coal & Mining Co.	Wilburton, Okla.	Wilburton, Okla.
East McCurtain Coal Co.	McCurtain, Okla.	Fort Smith, Ark.
Folsom Morris Coal & Mining Co.	Lehigh, Okla.	Oklahoma City, Okla.
Gaines Creek Coal Co.	Adamson, Okla.	Wilburton, Okla.
Great Western Coal & Coke Co.	Baker, Okla.	McAlester, Okla.
Gunther, Andrew P.	Bokoshe, Okla.	Fort Smith, Ark.
Hailey-Ola Coal Co.	Hailey and Lutie, Okla.	Edleyville, Okla.
Hartshorne Coal Co.	Hartshorne, Okla.	Hartshorne, Okla.
Hazleton Coal Co.	Coalgate, Okla.	Oklahoma City, Okla.
Indian Coal & Mining Co. ⁴	Poehontas, Okla.	Asheville, N. C.
Kali-Inla Coal Co.	Cambrin, Okla.	Hartshorne, Okla.
Keystone Coal & Mining Co.	Coalgate, Okla.	Coalgate, Okla.
Le Boquet Coal & Mining Co.	Hughes, Okla.	Gordon N. Peay, care W. P. Worthen Co., Bank- ers, Little Rock, Ark.
Milby-Dow Coal Co.	Dow, Okla.	Dow, Okla.
Missouri, Kansas & Texas Coal Co.	Wilburton, Okla.	Wilburton, Okla.

¹ This company was formerly the Eclipse Coal & Mining Co., but in December, 1918, was transferred.

² Operations of this company carried on under contract on approved leases of the Mazzard Coal & Mining Co.

³ Operations of this company at Carbon carried on under working contract by the Carbon Coal Co.

⁴ Operations of this company carried on under contract by McAlester-Alderson Coal Co.

Coal leases—Continued.

Name of lessee.	Mines at or near—	Principal office.
Milton Cooperative Colony ¹	Milton, Okla.	Guthrie, Okla.
McAlester-Choctaw Coal Co.	McAlester, Okla.	McAlester, Okla.
McAlester Coal & Coke Co.	Buck, Okla.	Do.
McAlester-Edwards Coal Co.	Pittsburg, Okla.	Do.
McCurtain Coal Land Co. ²	McCurtain, Okla.	Oklahoma City, Okla.
McMurray, John F.	McAlester, Okla.	McAlester, Okla.
McAlester-Adamson Coal Co.	Adamson, Okla.	Hartshorne, Okla.
North McAlester Coal Co.	North McAlester, Okla.	North McAlester, Okla.
Osage Coal & Mining Co.	Krebs, Okla.	Krebs, Okla.
Oliver, T. J., and Patterson, John ..	Blanco, Okla.	Dow, Okla.
Panama Coal Co.	Panama, Okla.	Kansas City, Mo.
Pierce Coal Co.	Adamson, Okla.	McAlester, Okla.
Poteau Valley Coal Co.	Wister, Okla.	Do.
Pocahontas Coal Co.	Pocahontas, Okla.	Hartshorne, Okla.
Phoenix Coal Co.	Halleyville, Okla.	McAlester, Okla.
Rock Island Coal Mining Co. ³	Alderson, Bache, Gowen, Heavener, and Harts- horne, Okla.	Chicago, Ill.
Samples Coal & Mining Co.	McAlester, Okla.	McAlester, Okla.
Southern Fuel Co.	Savanna, Okla.	Do.
St. Louis-Galveston Coal & Mining Co. ⁴	Lehigh, Okla.	Oklahoma City, Okla.
Story & Rice.	Blanco, Okla.	Dow, Okla.
Superior Smokeless Coal Co.	Tahona, Okla.	Tahona, Okla.
Savanna Mines.	Savanna, Okla.	McAlester, Okla.
Thomas Coal Co.	Blanco, Okla.	Do.
Texas Coal Co.	Hughes, Okla.	Hughes, Okla.

¹ Operations of this company carried on under contract by Milton Coal & Mining Co.² Operations of this company carried on under contract by the Blue Ridge Coal Co.³ Operations of this company carried on under contract on approved leases of the Choctaw, Oklahoma & Gulf Ry. Co.⁴ Operations of this company carried on under contract by the Oklahoma Mining & Stripping Co.*Asphalt leases.*

Name of lessee.	Mines at or near—	Principal office.
American Mineral Wax Co.	Woodford, Okla.	New York, N. Y.
Brodnax, W.	Dougharty, Okla.	McAlester, Okla.
Downard Asphalt Co.	Ardmore, Okla.	Ardmore, Okla.
Gilsonite Roofing & Paving Co.	Gilsonite, Okla.	Jumbo, Okla.
Rock Creek Natural Asphalt Co.	do.	Do.

RATES OF ROYALTY.

The rates of royalty on coal is 8 cents per ton, mine run.

The rate of royalty on asphalt is 60 cents per ton on refined and 10 cents per ton on crude.

AMOUNT OF COAL MINED.

The total amount of coal mined and the royalty paid thereon by each operator in the Choctaw Nation, Okla., during the fiscal year ended June 30, 1919, is shown on pages 342, 343, and 344

The total amount of asphalt mined and the royalty paid thereon by each operator in the Choctaw and Chickasaw Nations, Okla., during the fiscal year ended June 30, 1919, is shown on page 345.

Total amount of coal mined and royalty paid thereon.

Operator.	Tons.	Royalty.
Adamson Coal Co.		
Bache-Denman Coal Co.	15,721.50	\$1,257.72
Bedwell, E. D., Coal Co.	9,047.85	723.82
Bokoshe Smokeless Coal Co.	11,394	911.82
Craig Coal & Mining Co.	4,709.70	376.77
Cameron Coal & Mercantile Co.	27,517	2,201.36
Carbon Coal Co.		
Coalgate Co.	64,436	5,158.88
Columbia Coal Co.	7,310	584.80
Cutts, Geo. T., trustee.	65,836	5,266.88
Central Coal & Lumber Co.	127,958.35	10,236.66
Degnan-McConnell Coal Co.	114,192	9,135.36
Denison Coal Co.		
Degnan-McConnell Coal & Coke Co.	30,229.49	2,418.35
Eastern Coal & Mining Co.	64,415	5,153.20
East McCurtain Coal Co.	9,456	756.48
Folsom-Morris Coal & Mining Co.	321,026	25,682.08
Gaines Creek Coal Co.		
Great Western Coal & Coke Co.	42,626	3,410.08
Gunther, Andrew F.	35,519	2,841.52
Halley-Ola Coal Co.	167,413	13,393.04
Hartshorne Coal Co.	2,033	162.64
Hazleton Coal Co.	22,822	1,825.76
Indian Coal & Mining Co.	38,900	3,112.00
Kali-Inla Coal Co.	37,404.95	2,992.39
Keystone Coal & Mining Co.	27,908	2,232.64
Le Bosquet Coal & Mining Co.	29,200.25	2,336.02
Milby-Dow Coal Co.	108,394.71	8,671.57
Missouri, Kansas & Texas Coal Co.	140,309	11,224.72
Milton Cooperative Colony.	18,383	1,470.64
McAlester-Choctaw Coal Co.	7,529	603.12
McAlester Coal & Coke Co.	57,949	4,635.92
McAlester-Edwards Coal Co.	96,177	7,694.16
McCurtin Coal Land Co.	157,017	12,561.36
McMurray, John F.		
McAlester-Adamson Coal Co.	48,396	3,919.68
North McAlester Coal Co.	28,874	2,309.92
Osage Coal & Mining Co.	194,839.95	15,587.19
Oliver, T. J., and John Patterson.		
Panama Coal Co.		
Poteau Valley Coal Co.		
Pierce Coal Co.	10,375	830.00
Poehontas Coal Co.		
Phoenix Coal Co.	1,434	114.72
Rock Island Coal Mining Co.	627,651	50,212.06
Samples Coal & Mining Co.	32,439	2,595.12
Southern Fuel Co.	68,741	5,499.28
St. Louis-Galveston Coal & Mining Co.	50,943	4,075.44
Storrie & Rice.	4,477	358.16
Superior Smokeless Coal Co.	8,219.65	657.57
Savanna Mines.	4,372	349.76
Thomas Coal Co.	16,109.57	1,288.77
Texas Coal Co.	12,099	967.92
Total.	2,972,463.97	237,797.12

Months.	Coal mined.	Royalty.
	<i>Tons.</i>	
July, 1918.	318,368.20	\$25,369.45
August, 1918.	321,079.40	25,686.35
September, 1918.	282,877.28	22,630.18
October, 1918.	250,504.15	20,040.38
November, 1918.	271,740.10	21,739.21
December, 1918.	222,306.20	17,784.60
January, 1919.	232,589.35	18,607.14
February, 1919.	206,736.55	16,538.92
March, 1919.	204,736.23	16,378.89
April, 1919.	202,398.42	16,191.86
May, 1919.	235,449.29	18,835.92
June, 1919.	223,679.10	17,894.33
Total for year ended June 30, 1919.	2,972,464.27	237,797.07

Total amount of asphalt mined and royalty paid thereon for year ending June 30, 1919.

OPERATOR.	Asphalt mined (tons).	Royalty.	MONTHS.	Asphalt mined (tons).	Royalty.
American Mineral Wax Co.....	0	0	July, 1918.....	0	0
Brodnax, W.....	0	0	August, 1918.....	0	0
Downard Asphalt Co.....	0	0	September, 1918.....	0	0
Gilsonite Roofing & Paving Co.....	0	0	October, 1918.....	0	0
Rock Creek Natural Asphalt Co.....	0	0	November, 1918.....	0	0
			December, 1918.....	0	0
Total.....	0	0	January, 1919.....	0	0
			February, 1919.....	0	0
			March, 1919.....	0	0
			April, 1919.....	0	0
			May, 1919.....	0	0
			June, 1919.....	0	0
			Total.....	0	0

COMPARISON OF COAL OUTPUT.

The coal mined this year compared with that mined in 1918 shows a decrease of 429,100.18 tons, as shown by the following statement:

	Tons.
Total coal mined, year ended June 30, 1918.....	3,401,564.15
Total coal mined, year ended June 30, 1919.....	2,972,463.97
Decrease.....	429,100.18

COMPARISON OF ASPHALT OUTPUT.

No asphalt has been mined either this or the preceding year:

	Tons.
Total asphalt mined, year ended June 30, 1918.....	0
Total asphalt mined, year ended June 30, 1919.....	0
Comparison.....	0

COAL AND ASPHALT ACREAGE LEASED.

The following statement shows the names of lessees of coal and asphalt lands in the Choctaw and Chickasaw Nations, Okla., and the number of acres and leases operated by each as of June 30, 1919:

Coal acreage.

Name of lessee.	Num- ber of leases.	Number of acres.	Name of lessee.	Num- ber of leases.	Number of acres.
Adamson Coal Co.....	1	40.00	Eastern Coal & Mining Co.....	2	1,960.00
Bache-Denman Coal Co.....	1	960.00	East McCurtain Coal Co.....	1	34.43
Bedwell, E. D., Coal Co.....	1	635.99	Folsom-Morris Coal & Mining Co.....	10	9,960.00
Bokoshe Smokeless Coal Co.....	1	640.00	Gaines Creek Coal Co.....	1	160.00
Craig Coal & Mining Co.....	2	1,920.00	Great Western Coal & Coke Co.....	3	3,010.00
Cameron Coal & Mercantile Co.....	1	960.00	Gunther, Andrew P.....	1	695.18
Carbon Coal Co.....	1	640.00	Halley-Ola Coal Co.....	4	4,600.00
Coalgate Co.....	2	1,920.00	Hartshorne Coal Co.....	1	40.00
Columbia Coal Co.....	1	960.00	Hazelton Coal Co.....	1	620.00
Cutts, Geo. T., trustee.....	6	6,280.00	Indian Coal & Mining Co.....	1	960.00
Central Coal & Lumber Co.....	7	6,720.00	Kali-Inla Coal Co.....	2	490.00
Dagnan-McConnell Coal Co.....	1	1,000.00	Keystone Coal & Mining Co.....	1	340.00
Dagnan-McConnell Coal & Coke Co.....	5	4,800.00	Le Bosquet Coal & Mining Co.....	1	960.00
			Mazzard Coal & Mining Co.....	1	960.00

Coal acreage—Continued.

Name of lessee.	Number of leases.	Number of acres.	Name of lessee.	Number of leases.	Number of acres.
Milby-Dow Coal Co.....	2	2,560.00	Poteau Valley Coal Co.....	1	630.29
Missouri-Kansas & Texas Coal Co.....	1	960.00	Pierce Coal Co.....	1	360.00
Milbon Cooperative Colony.....	1	160.00	Rock Island Coal Mining Co.....	19	17,760.00
McAlester-Choctaw Coal Co.....	1	960.00	Samples Coal & Mining Co.....	2	1,240.00
McAlester Coal & Coke Co.....	2	2,080.00	Southern Fuel Co.....	1	1,250.00
McAlester-Edwards Coal Co.....	2	2,560.00	St. Louis-Galveston Coal & Mining Co.....	1	960.00
McCurtain Coal Land Co.....	7	6,660.00	Storrie & Rice.....	1	640.00
McMurray, John F.....	5	4,800.00	Superior Smokeless Coal Co.....	1	637.46
McAlester-Adamson Coal Co.....	1	640.00	Savanna Mines.....	2	1,280.00
North McAlester Coal Co.....	1	960.00	Thomas Coal Co.....	1	627.94
Osage Coal & Mining Co.....	7	7,320.00	Texas Coal Co.....	1	960.00
Oliver, T. J. & Patterson, John.....	1	640.00	Total.....	123	109,691.23
Panama Coal Co.....	1	960.00			

Asphalt lands.

Name of lessee.	Number of leases.	Number of acres.
American Mineral Wax Co.....	1	960
Brodnax, W.....	1	960
Downard Asphalt Co.....	1	380
Gilsonite Roofing & Paving Co.....	1	960
Rock Creek Natural Asphalt Co.....	1	640
Total.....	5	3,880

According to the foregoing statements there were on June 30, 1919, 123 coal leases, covering 109,691.23 acres, all of which are in the Choctaw Nation, and 5 asphalt leases, covering 3,880 acres, all of which leases are in the Chickasaw Nation, or a grand total of 128 coal and asphalt leases, covering a grand total of 113,571.23 acres.

On August 22, 1918, the department approved the assignment of leases 1 and 2 from the Dow Coal Co. to the Savanna mines.

On August 22, 1918, the department approved an additional acreage lease to T. J. Oliver and John Patterson, covering 640 acres of the unleased segregated coal lands in the Choctaw Nation.

On July 22, 1918, the department approved a coal lease to E. D. Bedwell Coal Co., covering 635.99 acres of the unleased segregated coal land in the Choctaw Nation.

On August 16, 1918, the department approved an assignment from the Union Coal Co. to the McAlester-Adamson Coal Co. on its lease No. 1.

On December 6, 1918, the department approved a lease to the East McCurtain Coal Co., covering 34-43 acres of the unleased segregated coal land in the Choctaw Nation.

On December 10, 1918, the department approved an additional acreage lease to the Hazelton Coal Co., covering 240 acres of the unleased segregated coal land in the Choctaw Nation.

On December 4, 1918, the department approved an additional acreage lease to the Hailey-Ola Coal Co., covering 640 acres of the unleased segregated coal land in the Choctaw Nation.

On December 9, 1918, the department approved a coal lease to C. A. Sturgeon, trading as the Poteau Valley Coal Co., covering 630.29 acres of the unleased segregated coal land in the Choctaw Nation.

On December 10, 1918, the department approved an assignment from the Eclipse Coal & Mining Co. of its lease No. 1 to the Adamson Coal Co.

In December, 1918, the department canceled the lease of the Denison Coal Co. on 960 acres for nonpayment of royalty.

In December, 1918, the department canceled the lease of the Pocahontas Coal Co., covering 960 acres, for nonpayment of royalty.

In December, 1918, the department canceled the lease of the Phoenix Coal Co., covering 444.90 acres, for nonpayment of royalty.

In December, 1918, the department canceled lease No. 1 of the St. Louis-Galveston Coal & Mining Co., covering 960 acres, for nonpayment of royalty.

In our previous quarterly reports for the quarters ending September 30, 1918, and December 31, 1918, the tonnage of the Degnan-McConnell Coal & Coke Co. was left out through error, and we herewith submit same by months covering those two quarters: For July, 2,881 tons, amounting to \$230.48 royalty; August, 3,046 tons, amounting to \$243.68 royalty; September, 3,070 tons, amounting to \$245.60 royalty, making a total tonnage for the quarter ending September 30 on this one company of 8,997 tons and \$719.76 royalty to be added to our grand total for the quarter ending September 30, 1918. For October, 1,869 tons, amounting to \$149.52 royalty; November, 2,783 tons, amounting to \$222.64 royalty; December, 933 tons, amounting to \$74.64 royalty, or a grand total for the quarter ending December 31, 1918, of 5,585 tons and \$446.80 royalty; these amounts to be added to our grand total for the quarter ending December 31, 1918. In our annual report for this year we have included these totals in computing total tonnage and royalty, both by months and in the grand total for the year ending June 30, 1919.

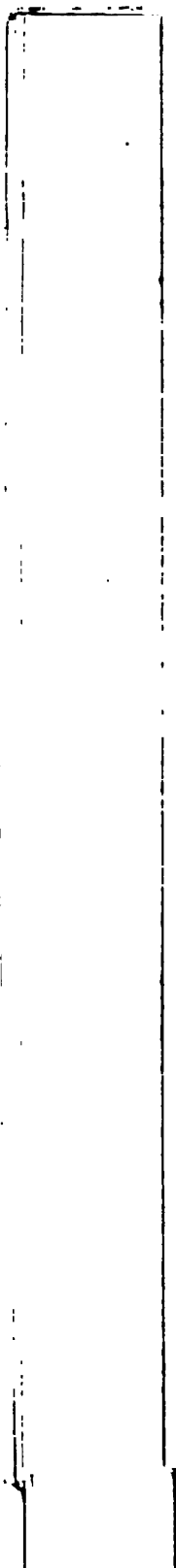
We report the cancellation of the Denison Coal Co., the Pocahontas Coal Co., the Phoenix Coal Co., and lease No. 1 of the St. Louis-Galveston Coal & Mining Co. in December, 1918, for nonpayment of royalty. We give no specific dates for the reason that up to date the department has not seen fit to furnish us the official notice of cancellation of these leases.

It will be noted that our grand total by months does not agree with our grand total by companies, the tonnage differing 0.30 tons and the royalty \$0.05, which is due to computing fractions in tonnage.

Regarding the cancellation of the Pocahontas Coal Co.'s lease, there are located on this lease some 56 houses which are being camped in and torn down by people traveling through the country. Therefore we respectfully recommend that the same be disposed of by this office, in conjunction with the field clerk representing your office, as soon as possible so that the Choctaw and Chickasaw Nations may realize as much as possible in cash for the above improvements.

Respectfully submitted.

WILLIAM R. McINTOSH,
Mining Trustee of Choctaw Nation.
J. HAMP WILLIS,
Mining Trustee of Chickasaw Nation.



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REPORT OF THE GOVERNOR OF ALASKA

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TERRITORY OF ALASKA, OFFICE OF GOVERNOR,
Juneau, September 26, 1919.

SIR: I have the honor to transmit herewith my annual report as governor of Alaska for the fiscal year ending June 30, 1919, together with relevant appendixes.

Respectfully,

THOMAS RIGGS, Jr.,
Governor.

HON. FRANKLIN K. LANE,
Secretary of the Interior, Washington, D. C.

INTRODUCTION.

It is my sincere hope that this report will be read by those Members of Congress and departmental executives before whom came the enactment and administration of laws affecting the Territory of Alaska.

It is not generally recognized that, in proportion to population, Alaska furnishes more trade to the United States than any other part of the Nation and equals the total trade of any of the other Territories, even with their great population and vast development.

I have endeavored to obtain figures regarding Federal taxation with only partial success, but from what data I have been able to procure, it would seem that had the Nation paid taxes last year in proportion to Alaska, the Federal Treasury would have been enriched by between five and six billions of dollars. It is well understood by those departments governing the Territory that Alaska is one of the greatest assets of the United States and that the original investment of \$7,200,000 has been repaid many times over; but, as with every other investment, we can not allow our property to be neglected, but must encourage and develop along sound, commercial lines. To use a mining term, Alaska is simply being "high-graded," to the detriment of the whole country. With the exception of one or two great low-grade mines, only the rich mineral deposits are being worked; only the greatest salmon and halibut fisheries exploited, while for lack of intelligent governmental assistance, the truly big resources of the country must perforce lie in idleness.

I think I am safe in stating that every Government official or Member of Congress who has ever visited Alaska has recognized its potential greatness, but to those to whom has not been given the opportunity of seeing the Territory and noting conditions, it is still viewed as the distant and desolate land at one time known as "Seward's folly." As a consequence, appropriations are placed at such low figures as to preclude any effectiveness; the rich mining regions are made unavailable for lack of transportation; the fisheries are threatened with exhaustion for lack of protection; lawlessness, particularly that fomented by pro-German, I. W. W., and Bolshevik elements, is becoming a menace; as happens nowhere else in the United States, the natives in time of epidemics are allowed to die either of disease or starvation; roads and railroad building must stop for a lack of funds; unwarranted reserves and withdrawals of lands frighten away prospective investors and settlers; oil lands can not be entered upon and explored, and, as a result of laws and regulations, at every turn appears the huge Teutonic sign "verboten."

And yet, notwithstanding all governmental neglect and repression, the people of Alaska, during the World War, responded more nobly to the call of duty than did the people of any other State or Territory. In three loan drives Alaska headed the Nation in oversubscription of her allotted quotas; and, in its support of the American Red Cross, Alaska, in proportion, completely eclipsed all competitors. To

furnish soldiers and sailors, Alaska was practically depopulated of young men, over 12 per cent of the entire number of white inhabitants—men, women, and children—answering the call to arms.

As required by law, in my report, I shall endeavor to cover all conditions existing in the Territory and make recommendations for the administration of existing laws and for new legislation to cover Territorial needs. I note that recommendations made by past governors have received little attention or consideration. In this, a mistake has been made, as the governor of Alaska is a Federal executive, appointed by the President, confirmed by the Senate, and established at the capital of the Territory for this very purpose. He is the only Federal official before whom come all phases of Territorial problems, and in a territory where practically the entire Government is by Federal law or regulation, it is important that his recommendations should receive consideration.

While much that herein appears may seem critical, it must not be thought that the people of Alaska are not keenly alive to, and appreciative of, the few constructive measures which have been inaugurated by the Federal Government. The governmentally constructed and operated railroad between Seward and Fairbanks will open up a vast territory to exploitation and settlement; slowly, very slowly, aids to navigation and coast surveys are lessening marine perils; the scientific bureaus of the executive departments are rendering undoubted help to the prospector, the miner, and to the farmer; patrols of small naval craft have cooperated with other authority in the suppression of lawlessness and the several fatal epidemics of influenza; the military cable and telegraph lines are invaluable. But I sincerely believe that, unless the Government pursues a most liberal policy in connection with the development of Alaska, the Territory can never reach that stage of productiveness for which there is every possibility and so become one of the great sources of revenue now so greatly needed in this period of national readjustment.

We hold out our hands to Washington, not as supplicants for bounty but in petition for permission to be allowed to develop as were the greatest western Territories, now the great western States.

REPORT OF THE GOVERNOR OF ALASKA.

The report of the governor should cover the calendar year instead of the fiscal year as at present. The major part of Territorial activities are seasonal, and any report covering merely the fiscal year must of necessity omit the commencement or completion of the great yearly operations of mining and fishing. In this report there will be mention of events happening subsequent to June 30, but included to make complete narrative. Another reason lies in the fact that during the summer months the governor should take advantage of the season of open travel and visit as much of the Territory as possible so as to acquaint himself at first hand with Territorial problems and not be tied down by the writing and compilation of the annual report.

DISASTERS DURING THE YEAR.

In addition to the trials of war visited upon Alaska, in common with the whole Nation, the Territory has been the victim of a number of disasters. We have suffered from flood, fire, famine, sickness, and sudden death. Floods have caused great destruction in several of our towns, notably Seward, Juneau, and Nenana; fire has wiped out a large part of the business section of Fairbanks; and even now a large proportion of our native population on the Seward Peninsula is receiving relief from starvation through agencies authorized and empowered by me. Influenza has swept through our coastal regions like flames through a forest, and in the wreck of the steamer *Princess Sophia*, on an unlighted reef, the lives of 350 persons, many of whom were Alaskans, were suddenly blotted out, there being no survivor to tell of the last agony. In the list of those lost is found the name of an able and energetic official, Mr. John F. Pugh, collector of customs for Alaska.

INFLUENZA.

From a Territorial standpoint, the most serious of these disasters has been the scourge of influenza. Following the lines of steamer travel, early in October, influenza broke out in practically all the coastal towns. Cordova, under strict quarantine, escaped until a premature lifting of the health regulations allowed the disease to become established. Travel to the interior was stopped and so escaped an outbreak. Had the epidemic reached the native and white settlements of the Yukon the mortality would have undoubtedly been high, as pneumonia is very fatal in the intense cold.

It is estimated by the acting assistant commissioner of health for the second division and the officials of the Bureau of Education that there have been 1,500 deaths, chiefly among the natives, on the Seward Peninsula and vicinity. I have been told that there were over

30 deaths among the passengers on the last trip of the steamer *Victoria*. At Kodiak and on Cook Inlet the mortality was extremely high. Nearly 500 native children who would otherwise have starved were cared for under my authorization.

Shortly after the outbreak of influenza, calls for relief commenced to arrive from all parts of Alaska. The Territorial appropriation providing for the enforcement of the health and sanitation act and for the relief of destitution fell far short of being sufficient for the needs. I was faced by the alternatives of allowing the disease to run rampant throughout the Territory or of assuming authority to give relief and establish quarantine measures.

Particularly in Nome and on the Seward Peninsula was the epidemic most severe. Whole villages of Eskimos lost their entire adult population. Many infants were frozen in their dead mothers' arms. To make matters more gruesome, the half-starved dogs mangled and mutilated the dead and dying. The Bureau of Education, in charge of the natives of Alaska, was powerless to render much assistance on account of lack of funds. I was asked to take charge of the situation. Bearing in mind that law which reads—

Nor shall any department or any officer of the Government * * * employ personal service in excess of that authorized by law, except in cases of sudden emergency involving the loss of human life or the destruction of property, and the many deficiency appropriations made by Congress in the past for the relief of other wards of the Government, particularly in the States, I assumed all authority and instituted such measures as seemed best. Medical relief was given where possible, destitution was relieved, and the orphan children gathered up and placed in institutions until appropriations should become available for their permanent care. The Public Health Service rendered aid to a limited extent in the matter of employing physicians and nurses. After the worst of the epidemic was over the American Red Cross lent some financial assistance and sent nurses and physicians north on the naval collier *Brutus*. The bulk of the authorizations, however, were unprovided for. The burial of dead natives alone cost approximately \$20,000.

A bill was introduced in the Senate appropriating \$100,000 for Alaskan relief, and passed that body, but failed in the House. Items attached to the sundry civil and deficiency bills also failed of passage in the House. As a last resort, I appealed to the legislature and received an appropriation from our scanty treasury of \$70,000 for the relief of the native wards of the Federal Government and \$23,000 for whites—this in addition to some \$18,000 or \$20,000 already expended from various other Territorial funds. At approximately the same time Congress considered appropriations of \$100,000,000 for the relief of the destitute of Europe and \$1,000,000 for fighting influenza in the States.

It will be impossible to ever receive a full account of all the distress caused by the epidemic of October, November, and December. Even yet reports are arriving of several villages having been entirely wiped out and the bodies eaten by dogs. One little half-breed girl, picked up in an igloo and hurried to the hospital, suffered amputation of both legs. The superintendent of education, Mr. Walter Shields, was one of the first to die. Nome's only physician, Dr.

Neuman, was himself early smitten with pneumonia and had two relapses, leaving the post surgeon, Dr. Burson, the only medical officer in the vicinity. The acting superintendent of education, Mr. Evans, worked long and unceasingly, rendering relief and authorizing care for the many orphans.

I doubt if similar conditions existed anywhere in the world—the intense cold of the arctic days, the long distances to be traveled by dog team, the living children huddled against their dead parents already being gnawed by the wolfish dogs. Dr. Lamb, of Marshall, at my request, hurried to Old Hamilton, where all the natives were dying, but he himself caught the disease and died. And no assistance at that time could be procured from any helpful agency. They were all too much engrossed with the woes of Europe to be able to note our own wards, seemingly protected by solemn treaty with Russia, dying by swarms in the dark of the northern nights.

At Kodiak the last steamer for the early winter planted influenza among the natives and half-breeds. There is no doctor at Kodiak, and storms prevented the attempted sending of relief until the naval collier *Brutus* arrived after the epidemic had subsided. Had it not been for the splendid efforts of the deputy United States marshal at Kodiak, Mr. Karl Armstrong, the mortality would have been far-reaching and very fatal. He early stopped travel among the Aleuts and personally cared for the sufferers.

And so the winter epidemic finally wore itself out, but with the opening of the fishing season the first steamers to Unalaska and Bristol Bay brought the deadly germ. For these places the Indian question is solved. Two hundred and thirty-eight orphans, so far reported, are practically all that are left of an Aleut and half-breed population of between 800 and 1,000. In this epidemic the Territory was not placed to as great an expense as in the former one. The Navy Department responded nobly to my cry for help. Capt. Dodge, with the coast guard cutter *Unalga*, was early on the scene in Unalaska. Officers and crew threw themselves into the work of relief with vim and enthusiasm. Practically the entire population was down. The men of the *Unalga* nursed the sufferers and cooked for practically the entire village. Lieut. Commander Reardon, on the *Vicksburg*, left Juneau without delay and cooperated willingly and efficiently with Capt. Dodge. Later still, Capt. Tarrant, on the *Marblehead*, toward the end of the epidemic, arrived with Red Cross nurses. The jackies, with Navy spirit, cooked, nursed, laundered, and sewed garments for the sick. The work of the Navy was splendid. Nor must I fail to express my appreciation to the many unpaid workers for Territorial welfare; there were many who neither asked nor received pay or recognition for services freely and willingly given.

If there should be another epidemic this year I do not know what I can do. The Territory can not afford to go to such expense again, nor is it right that it should be required to do so.

CONSOLIDATION OF GOVERNMENT AUTHORITY.

As time goes on and new legislation becomes effective the confusion existing as a result of conflicting departmental authority in Alaska becomes more and more evident. Those interested in Alas-

kan conditions can do no better than to read the bulletin written by Secretary Lane, entitled "Red Tape in Alaska." More than anything else that has been written this shows the absolute necessity for a consolidation of authority. In forest reserves the Department of Agriculture has full charge until a settler appears, when, after satisfying the officials of the Forest Service, he must comply with the land laws executed by the Department of the Interior. This causes unavoidable delay. The fisheries are under the Department of Commerce, but cannery sites, if in forest reserves, must be procured from the Department of Agriculture, while fish-trap sites are procured from the War Department. Of the wild animals, those noted as game animals, are under the Department of Agriculture, while the fur-bearing animals are under the Department of Commerce. Separate wardens are appointed for each service.

Road building is so mixed up it is almost impossible to make a start in the telling. The War Department builds and maintains roads under direct appropriation by Congress and with money derived from the Alaska fund. Some roads within forest reserves are constructed entirely by the Department of Agriculture, while others are constructed by the Alaska Road Commission of the War Department with funds furnished by the Department of Agriculture. Other roads within forests are constructed by the Department of Agriculture under cooperative agreement with the War Department and the Territory. Still other roads are built by the Territory from funds derived from the forests, and still more roads are built by the Territory from its own resources. The various operations are comparatively small; yet each organization must have its own distinct overhead.

With the permission of the Department of Agriculture, birch wood, so much needed in the manufacture of furniture, can be exported from the forest reserves, but the best stands of birch lie within the public lands and are prohibited from export by law. As there is no local use for birch, except as firewood, much valuable timber is destroyed and good revenue lost. This should undoubtedly be rectified.

There are bird and mammal reserves and islands for lease to fox farmers administered by the Department of Agriculture. There are other islands leased for fox farming by the Department of Commerce. National park and national monument reservations are under the Department of the Interior. There are other reserves under the jurisdiction of the War Department, the Interior Department, the Navy Department, the Department of Agriculture, the Department of Commerce, the Department of Justice, and the Treasury Department. Many of the reservations are ill advised and should and would be eliminated if there could be one central authority to take any interest in the matter. Many of the reserves have been forgotten even by the department making them.

That all this interlocking authority, of which the above is only an incomplete statement, leads to inefficiency, delay, and extravagance, is acknowledged by all; yet it seems impossible to overcome the state of existing inertia.

I advocate the centralization of all possible authority in Alaska in the Department of the Interior, which is the logical department

to handle Territorial affairs. The department should then centralize all bureau administration in Alaska itself. This would make an effective government responsible to but one chief. There could be one Territorial budget and one overhead administrative organization. Action at all times could be prompt, and there would not exist the need of corresponding at times with as many as three different departments before desired action can be taken.

POLICE PROTECTION.

If I were asked, What is the crying need of Alaska? I should unhesitatingly answer, Police protection. There are four United States marshals, one for each of the four judicial divisions into which the Territory is divided. There are 55 deputy marshals, including the chief deputies, clerks, stenographers of the various marshals' offices, leaving approximately 40 deputies available for the enforcement of law over 590,000 square miles of territory. These marshals are so hemmed in with departmental restrictions that they can not be considered a police force in any sense of the word. They are technically process servers solely, except when they exceed authority in the interest of law and order. It is really remarkable that with such restricted authority the marshals have been able to accomplish what they have, but the fact remains that as a force for the prevention and detection of crime they are not of the highest value.

In addition to the marshals there are some 30 or 35 wardens of various sorts—fish wardens, fur wardens, forest rangers, game wardens, and special agents for the suppression of the liquor traffic among the natives. I have endeavored to have reciprocal duties placed on all these wardens, and while this has nominally been done by the greater number of the bureaus, still there has been little interest evoked among the individual employees, excepting among those directly responsible to the governor's office. Our wardens have rendered undoubted service to the Bureau of Fisheries in the matter of detecting and seizing illegally taken furs and in the enforcement of fish regulations. Some employees of other bureaus have refused to cooperate at all.

In my report for 1918 I advocated the establishment of a uniformed constabulary. I again earnestly make this recommendation. A force so established could exercise the entire police power of the Territory, including that of the various bureaus with the exception of the necessary technical employees. The force could be patterned after the State constabulary of Pennsylvania or the royal northwest mounted police of Canada, and should be absolutely divorced from politics. The officers and men should be carefully picked and trained. The officers should be given the powers of justices of the peace when far removed from offices of United States commissioners.

Now is the time of all others, while the Army is being demobilized, when it would be possible to pick up a splendid body of men, trained as soldiers and accustomed to hardship. We need a constabulary not only for police duty but we need it for all manner of relief work, rescue of lost persons, enforcement of quarantine and sanitary measures, and for special duty of every kind. Two hundred men of a constabulary scattered throughout the Territory, with travel equipment suited to their particular locality, would have a wonderful effect upon Territorial development and could perform all the work

now done by the wardens of the various bureaus. A battalion of troops divided among several Alaskan Army posts could be withdrawn and the posts turned over to the constabulary. Troops are absolutely lost in Alaska; they have no duties outside of barracks routine. In winter there is little opportunity for outdoor life; in consequence the men are discontented and unhappy. Aside from a moral influence and from the benefit derived from money spent in the towns near by, they are of little use to the Territory except in marked emergencies. Let a constabulary be substituted for the soldiery. The cost to the Government will be little more and a constructive service will be established.

NAVAL PATROL.

During 1918 a naval patrol, consisting of two submarine chasers, the *309* and *310* and the converted Coast and Geodetic Survey ships *Explorer* and *Patterson*, were established in Alaskan waters. The two sub chasers were stationed in southeastern Alaska, while the two larger ships were sent to Prince William Sound and Bristol Bay. Their presence had an undoubted effect on the seditious element within the Territory, which showed evidences several times of causing serious disturbances. The principal duty of the patrol lay in the protection of the fishing and canning industries, which at that time were furnishing greatly needed supplies of sea-food products. On account of the beneficial results of the former patrol, I requested that it be continued throughout the year 1919. The gunboat *Vicksburg* and the submarine chasers were returned to Alaskan waters in May and have been most energetic in their activities. The *Vicksburg* rendered splendid service in the Aleutian Islands and in the vicinity of Bristol Bay during the outbreak of influenza in May and June of this year. The *310*, stationed in Prince William Sound, quieted what bid fair to be a serious disturbance between the white and native fishermen at Yakutat, and the *309* has rendered similar service at Klawock. At present the patrol is taking active steps to suppress fish piracy, which has been engaged in more than ever before.

There should constantly be stationed at Juneau a naval or Coast Guard vessel, available for rescue work in case of shipwreck and for cooperation at all times with the Federal and Territorial authorities. During the summer season there should be at least four of the smaller craft on constant duty. So far the results have been invaluable, particularly in the absence of other police power.

The patrol is ordered to Alaska "until the close of navigation," but as there is no close of navigation in southern and southeastern waters, I take this to mean until the close of the fishing season.

Besides the naval patrol during the summer months, the Coast Guard cutters *Bear* and *Unalga*, although under temporary naval control, have been at their usual summer stations, the *Unalga* having rendered distinguished service in the Aleutian Islands and Bristol Bay during the epidemic of influenza among the natives.

POPULATION.

During 1918 the population of Alaska reached its lowest ebb. Vessels reporting to the customs showed an excess of departures over arrivals of 9,909 persons. Small vessels carried a great number to

the States and British Columbia of whom there is no account. After the signing of the armistice immigration became noticeable. In the spring of this year all vessels coming to Alaska were crowded to capacity and at the time of this writing passage must be engaged weeks in advance. At the close of the calendar year 1918, taking the customhouse figures in consideration with the census of 1910 and the vital statistics available, the white population barely exceeded 30,000. I believe that during the years of exodus (1916-1918) fully 10,000 additional people left on small craft, Government ships, transports, and other unreported boats, so that the actual population probably did not exceed 20,000. The number of persons voting at the election of 1918 seems to bear out this hypothesis. For the first six months of 1919 the excess of arrivals over departures, as reported to the customs, was 11,588, but this figure includes a great number of cannery employees, perhaps 5,000 or 6,000, who return to the States at the close of the fishing season.

I estimate the white population at the end of the fiscal year 1919 to be about 32,000.

The census of 1910 enumerates 25,331 natives of pure and mixed blood. The Bureau of Education estimates that there had been little change in this number during the intervening years. During the past fiscal year there has probably been a loss of nearly 2,000 natives as a result of the epidemic of influenza. The normal death rate will undoubtedly increase, caused by tuberculosis, resultant of influenza. There are probably 23,000 natives now in Alaska. The total population, therefore, white and native, is about 55,000, or less than one person to every 10 square miles.

Indications point to a continued immigration as a result of Army demobilization and the closing of war-time industries. Alaska is receiving the extremes in the social scale. On the one hand, the fine young men of the type which developed the great western States are becoming evident in every community, and, on the other hand, the I. W. W., alien enemy, and Bolshevik, knowing the unprotected condition of the Territory, are arriving in force and making their presence known. The great number of foreigners in Alaska who can scarcely speak the English language fall an easy victim to the insidious propaganda of the seditious agitator. It does not seem right that the decent, honest, law-abiding majority should not receive full protection at all times.

MINING CONDITIONS.

GOLD AND SILVER.

Mining in Alaska has never before been conducted under such adverse conditions. The gold placers, heretofore the backbone of the industry, are the principal sufferers. Wages, costs of equipment and supplies, high rates of transportation, shortage of labor, together with the depletion of the known rich deposits, have all conspired to reduce not only the production of placer gold, but have also prevented contemplated development of the lower-grade deposits. For similar reasons the great low-grade lode mines of the Gastineau Channel have not been able to operate to any marked profit, although all modern devices for reducing costs are being employed. Gold

mining in Alaska is no longer a business to attract heavy investment, unless the world standard is changed and gold is put on a commodity basis and receives the benefits of market demands. Gold mining should receive every possible help from the Government.

A new gold and silver camp attracting attention is the Portland Canal district. The mineralized zone closely follows the international boundary, with, so far, the best showings in British Columbia, although excellent prospects are found on the Alaskan side. The mines and prospects of the Salmon River, both in Alaska and British Columbia, are all tributary to the Alaskan town of Hyder, while everything from the Bear River must pass through Stewart, British Columbia. One mine, the Premier, just across the boundary in British Columbia, has shipped several hundred tons of phenomenally rich gold and silver ore, and within a year should be a steady producer. At this mine no attempt is made to ship ore valued at less than \$100 to the ton.

It is interesting to note that Col. Alfred H. Brooks, of the United States Geological Survey, has long predicted the finding of mineral deposits lying along the formation and extending the full length of the coast of southeastern Alaska. I look for extensive future development not only on Portland Canal but also up the Unuk and Iskoot Rivers. Willow Creek, near the line of the Government railroad, is forging steadily to the fore, and persistent rumors of large refractory deposits in the vicinity of Broad Pass raise hopes for increased railroad tonnage. In Prince William Sound, Valdez is once more creating excitement in new lode discoveries and reported platinum finds.

COPPER.

Owing to the lack of transportation during 1918 and governmental demands during the war for the higher grade copper ores, practically none of the low-grade copper mines were enabled to continue normal shipments to the great distress of the operators. During the first six months of 1919 the low price of copper was another deterrent feature. Complaints have been lodged with me by shippers of low-grade ores that the slag loss charge of 26 pounds per ton is not warranted, as such loss in reality is not more than 4 pounds or 6 pounds at the most. There are a great number of low-grade copper mines and prospects in Alaska, which would seem to offer an attractive field for investment by parties capable of bearing the cost of installation of concentration plants.

CHROME.

Chrome ore of good quality was mined at Port Chatham and a considerable plant investment made, but the owners were unable to procure transportation when this metal was in demand, and in consequence suffered severe loss. I have made a careful investigation, and believe that operations were instituted in good faith, in the understanding that they would be protected by the Government. The chrome producers should be recompensed against loss.

COAL.

From present indications I am convinced that good coal in export quantity will be found in both the Matanuska and Bering River

fields. In the Matanuska field the Alaskan Engineering Commission has opened up the Eska Creek mine on a production basis. A washing plant is badly needed, but the coals, with only a small amount of hand picking, give excellent satisfaction for all railroad requirements. The Chickaloon mine, of high-grade naval coal, is being developed, and it is hoped will shortly be also placed on a production basis.

In the Bering River field, as a result of development work on a lease in the western part of the field, several good veins of semi-bituminous coal have been cut, ranging from 30 inches to 15 feet. Here, too, the coal will probably have to be washed, although there are sections of one vein, having good walls, which appear to be very clean. The lessee is confident that further development work will prove the mine.

In the matter of coal once more transportation becomes a prime factor. There must be an export outlet. It is probable that trans-pacific coal-burning ships will find it advantageous to establish a coal supply in the Aleutian Islands not far from the great circle sailing routes between Puget Sound ports and the Orient. A naval base in Alaska will demand coal in quantity, which can best be supplied from our coal fields. The opening up of the coal fields and their connection with rail and water transportation will eventually result in the building of a smelter on Prince William Sound, whereat all the ores of the district can be reduced. When this happens many of the lower-grade mines, not now workable to profit, will become active producers.

The company operating a mine along the Government railroad near the Little Susitna River has been quite active on a small scale during the year, the average monthly output being 135 tons, the coal being marketed principally in Anchorage and Seward, a quantity, however, being shipped to the copper mine at Latouche for experimental purposes.

In the Nenana field a mine has been opened up near mile 366 of the Government railroad on the west side of the Nenana River about $1\frac{1}{2}$ miles below the point where Hoseanna (Lignite) Creek flows into the Nenana. The Alaskan Engineering Commission has let a contract for 5,000 tons to the firm operating at this point. A fair grade of lignite was also discovered on the right of way of the railroad at mile 387 and a contract let for 2,750 tons. As the surveyed coal lands are on the opposite side of the river and are not situated in leasing blocks, some difficulty has been encountered in procuring necessary capital for development. This situation should be remedied by the Government completing the survey of this portion of the field and placing it into leasing units. It is hardly probable that sufficient coal can be mined on the west side of the Nenana River to supply the needs of Fairbanks, and steps should be taken as speedily as is consistent with the plans of the commission to construct a branch line into the coal fields proper.

PETROLEUM.

It seems probable at present that Congress will enact laws at this session which will permit the development of oil fields which are

known to be of value. Under existing law all oil fields are withdrawn from either entry or lease. There is only one patented claim in all of Alaska. A few operators, having faith in ultimate action by the Government, have maintained their interest in the Territory for years and have been active in endeavoring to procure legislation which will allow development. In all fairness surely the Government can not much longer prohibit an industry which means so much to the Territory. On the one patented claim lying in the Katalla field the owners are producing, in a small way, pumping and refining about 50 barrels per day. The oil is very high grade and of paraffin base. The product finds a ready market. There are approximately 1,000 gas boats in Alaska, practically all of which are now importing their oils from the States. This demand in itself would create quite an industry, eliminating the still greater demand for fuel oils used by steamers and mines. It is noted that the oil production and consumption curves have crossed and, if for no other reason than to help reduce the exorbitant prices now paid for oils, every encouragement should be held out to the developers of the fields.

OTHER MINERALS.

Of the other minerals, it is unnecessary to make comment additional to that contained in the report of the Geological Survey following. With an increased market and available transportation, Alaska will come well to the fore in the production of zinc, tin, lead, antimony, molybdenum, tungsten, barium gypsum, marble, and other minerals. Mention must be made of recent reported discoveries in southeastern Alaska of large deposits of lime rock, 90 per cent pure, which I understand will be greatly in demand should pulp mills ever be allowed to become established in the forest reserves.

MINING IN ALASKA IN 1918.

The following statement is an abstract of the annual report on the mineral resources and mine production of Alaska in 1918 by the United States Geological Survey, Department of the Interior. The complete report is contained in Bulletin 712, which can be obtained on application to the Director United States Geological Survey, Washington, D. C.

MINERAL PRODUCTION.

The value of the mineral output of Alaska in 1918 is estimated at \$28,253,961, a decrease of almost \$12,500,000 from the value in 1917 and the smallest since 1914. The decrease was chiefly in copper and gold and was due to a shortage of labor and ships and high cost of mining. There was an increase of more than 60 per cent in the production of mineral fuels and a slight increase in chrome ore. The only new item among Alaska mineral products in 1918 is palladium. Since 1880 Alaska has produced gold, silver, copper, and other minerals worth more than \$418,000,000.

Alaska mines produced gold to the value of about \$9,480,952 in 1918, compared with \$14,650,000 in 1917. The total value of the gold mined in the Territory is now about \$302,000,000, of which \$213,000,000 has been won from placers. In 1918 about 69,224,951 pounds

of copper was produced in Alaska, valued at about \$17,098,563. The production in 1917 was 88,793,000 pounds, valued at \$24,240,000. The total copper produced to date is 497,786,565 pounds, valued at \$105,743,033. The value of Alaska's lesser mineral products in 1918 was as follows: Silver, \$847,789; coal, \$411,850; tin, \$118,000; lead, \$88,088; miscellaneous metallic products, including chrome ore, tungsten, palladium, platinum, and antimony, \$96,100; and miscellaneous nonmetallic products, including petroleum, marble, gypsum, and lime, \$120,619.

COPPER MINING.

The copper production of Alaska in 1918 was about 69,224,951 pounds, valued at \$17,098,653, obtained from about 722,047 tons of ore. This is less than the production of 1917, which was 88,793,000 pounds, valued at \$24,240,000, obtained from 660,000 tons of ore. The reduction in output was due to shortage of labor and ships. During the year 17 copper mines were operated, the same number as in 1917. Seven mines in the Ketchikan district yielded 1,372,347 pounds of copper; five in the Prince William Sound district yielded 15,311,590 pounds; and five mines in the Chitina district yielded 52,541,014 pounds.

GOLD PLACER MINING.

The value of the placer gold produced in Alaska in 1918 is about \$5,900,000, derived by regions as follows: Yukon basin, \$4,264,000; Seward Peninsula, \$1,108,000; Copper River, \$239,000; Cook Inlet-Susitna region, \$160,000; Kuskokwim region, \$100,000; miscellaneous, \$29,000. The total production in 1917 was \$9,810,000. The decrease in 1918 was general throughout the Territory, except in the Copper River, Yentna, and some of the smaller Yukon districts. The decrease was in general due to curtailment of operations because of a shortage of labor and high cost of supplies. Local decreases were due also to unfavorable climatic conditions and to the depletion of some of the richer placers. Twenty-eight dredges were operated in 1918—21 in Seward Peninsula, 3 in the Iditarod district, and 1 each in the Circle, Fairbanks, Yentna, and Kuskokwim districts. Thirty-six dredges were operated in 1917.

GOLD LODE MINING.

About 25 gold lode mines were operated in 1918, compared with 31 in 1917. The value of the lode gold mined in 1918 is about \$3,473,317, compared with \$4,580,000 in 1917. The decrease was due partly to the disaster at the Treadwell mine in April, 1917, and partly to curtailment of operations, especially in the Juneau district, because of shortage of labor. There were increases in output at the Chichagof mine in southeastern Alaska and in the Willow Creek district. Most of the gold mines on Prince William Sound have suspended operations. The mill and cyanide plant of the North Midas mine, in the Chitina Valley, was completed and began operating late in the year. In the Fairbanks district seven small mines operated part of the year, yielding a total output about half as large as in 1917.

MINERAL FUELS.

There was a notable increase in the production of mineral fuels in Alaska in 1918, and it is believed that a substantial coal-mining industry has at last been started. The output of coal in 1918 was 75,606 tons, valued at \$411,850, compared with 53,955 tons, valued at \$265,317 in 1917. The larger part came from the Matanuska field, which yielded 63,092 tons. The remainder came from 8 or 10 small mines in various parts of the Territory. All these mines, except in the Matanuska and Bering River fields and at Port Graham, produced coal for local use under free-use permits.

In the Matanuska field the Eska Creek mines were operated regularly throughout the year by the Alaska Engineering Commission to supply fuel for railroad and other Government use. At the Chickaloon mine, also operated by the Alaskan Engineering Commission, the work has consisted primarily of exploration and development, and only a small amount of coal, won incidentally, has been produced. In 1918 for the first time Matanuska coal was shipped beyond Anchorage. Private operations preparatory to mining were continued by two lessees in the Matanuska field, but their mines are not yet productive.

It is reported that in the Bering River field the railroad has been extended from its temporary terminus on Bering River to the mine of the Alaska Petroleum & Coal Co. in the eastern part of the field, and that small shipments of semianthracite coal were made late in the year. A lease was granted in 1918 to another company for a tract of semibituminous coal land in the western part of the field and it is reported that extensive operations preparatory to mining are being undertaken.

In the Nenana field no leases have yet been granted, but a small amount of lignite was mined for use in the construction of the railroad.

In the Cook Inlet region lignite was mined at Bluff Point on Port Graham, in the Cache Creek district, and on the Little Susitna River for local markets.

In northern Alaska lignite mined near Unalaklik on Norton Sound was shipped to Nome and St. Michael, and lignite mined on Kobuk River was shipped to Kotzebue. It was reported that lignite would be mined on Kugruk River, Seward Peninsula, during the winter of 1918-19 for use at the placer mines on the Inmachuk.

The Alaska petroleum output is still derived wholly from the single patented claim in the Katalla field. The old wells on this claim and the refinery were operated as usual, and two new productive wells were drilled. The total production was somewhat larger than in 1917.

TIN MINING.

About 104½ tons of cassiterite, containing 136,000 pounds of tin, was mined in Alaska in 1918. Most of this came from the York district, Seward Peninsula, where one tin dredge was operated. Stream tin was also obtained by sluicing at one mine in the York district, at several mines in the Hot Springs district, at one mine in the Ruby district, and at one mine in the Gold Hill district. Considerable work was done on the Lost River tin lodes, but no ore was mined. The mination of placer concentrates by the Geological Survey has

resulted in the discovery of stream tin in concentrates from Yentna River in such amount as to indicate that it possibly occurs in commercial quantities, and also in small amounts in concentrates from Boob Creek, in the Tolstoi district; from Willow Creek, near Nome; and from Riglagalik River, in the Kuskokwim Delta. The discovery of placer tin has been reported from Potato and Humboldt Creeks on Seward Peninsula and from Moran Creek, a tributary of Melozi River, where the gravels are said to contain $2\frac{1}{2}$ pounds of tin and 10 cents' worth of gold to the cubic yard.

MISCELLANEOUS MINING.

Among the miscellaneous metallic products silver was produced in 1918 only from copper and gold mines and lead only from gold mines. Some silver lead ore was mined but not shipped from a mine in Seward Peninsula. Chrome ore was mined at Port Chatham on a somewhat larger scale than in 1917. The production of tungsten continued at several mines in the Fairbanks district and Seward Peninsula, but the total output was only about 11 tons, valued at \$22,000. A vein of scheelite has been discovered near Sitka. The mining of antimony ore (stibnite) almost ceased because of low prices.

One of the most interesting events of the year in connection with Alaska mining is the production of palladium from the copper ore of the Salt Chuck mine near Ketchikan. The recovery of substantial amounts of palladium and of some platinum is authentically reported. Platinum was recovered also from the gold placers of the Dime Creek district, Seward Peninsula, in larger amounts than last year. The recovery of some platinum was reported from Boob Creek in the Tolstoi district and from Slate Creek in the Chistochina district.

Among the miscellaneous nonmetallic products marble was quarried in a somewhat lesser amount than in 1917. The production of gypsum decreased, as the gypsum mine on Chichagof Island has not operated since March, when the mine buildings were burned.

REVIEW BY DISTRICTS.

SOUTHEASTERN ALASKA.

The mineral production of southeastern Alaska in 1918 is valued at \$3,825,495, compared with \$5,370,000 in 1917. The gold was worth \$3,195,939; copper, \$338,970; silver (derived wholly from gold and copper mines), \$97,878; and miscellaneous products, including lead (from gold mines), gypsum, marble, palladium, and platinum, \$192,708. These products were derived from six gold quartz mines, seven copper mines, several small placer mines, one gypsum mine, and one marble quarry.

In the Ketchikan district the It, Jumbo, Rush & Brown, Mamie, Salt Chuck, and Rich Hill mines were operated, each for at least part of the year, producing about 1,372,347 pounds of copper and \$37,952 worth of gold and silver. The new concentrating plant of the Salt Chuck mine is reported to have been operated successfully. All the mines of the Ketchikan district were affected by shortage of labor and ships. The most interesting local mining feature is the recovery of palladium from the concentrates of the Salt Chuck mine.

In the Juneau district the Alaska-Gastineau, Alaska-Juneau, and Ready Bullion mines were operated throughout the year, but at a reduced capacity because of scarcity of labor. Work preparatory to mining was undertaken at several nonproducing mines.

In the Sitka district the Chichagof mine was operated throughout the year, and extensive developments were under way at the Hirst-Chichagof property.

Preparations for mining were undertaken at the Molybdenite deposit at Shakan. The gypsum mine on Chichagof Island has been shut down since March because of a fire. The marble quarry at Token made periodic shipments throughout the year.

COPPER RIVER REGION.

The productive mines of the Copper River region in 1918 included five copper mines and one gold lode mine in the Chitina Valley and the gold placer mines of the Nizina and Chistochina districts. The total value of the mineral output of the Copper River region was about \$13,811,135.

The Kennecott-Bonanza and Jumbo mines were in continuous operation except when the Bonanza mine was shut down for two weeks because the tram had been carried away by snowslides. Shipments from the Jumbo mine were curtailed for six weeks from the same cause. The production of both mines was reduced throughout the year by scarcity of labor, the mines being operated from March 1 to October 1 with approximately a 75 per cent crew. In October the crew was increased to about 90 per cent of the normal capacity of the mines. At the Jumbo mine a new double-compartment incline was begun and was extended to the 500 level. At the Bonanza mine the double-compartment incline was extended to the 800 level. The 700 level was the only new level opened during the year, but a large amount of development was done in the 600 level. Some work was done preparatory to increasing the capacity of the Bonanza tramway from 500 to 800 tons and of the Jumbo tramway from 450 to 650 tons a day. At the mill only minor changes and additions were made. The addition to the ammonia leaching plant was not entirely completed during the year, but was so far advanced that the plant is now capable of treating all tailings coming from the concentrating mill. Material treated in the leaching plant for the year will assay approximately 0.85 per cent of copper in the form of carbonates. An extraction of about 75 per cent will be made, with a loss of half a pound of ammonia per ton of material leached. The Erie mine was operated until August 10, when it was shut down for lack of labor.

The Mother Lode mine made shipments of ore during the winter. Developments at the Mother Lode mine include the continuation of the sinking of the shaft and the driving and development of the Rhodes level by about 2,500 feet of drifting and tunneling thereon. Some ore was shipped from the Westover mine in the winter. The Nugget Creek mine of the Alaska Copper Corporation was operated during part of the year, and some ore and concentrates were shipped from it. A mill was installed in 1918. Development work was continued at several other copper properties.

The gold mine of the North Midas Copper Co. was operated during part of the year, and a carload of ore from this mine was shipped during the winter. A mill and cyanide plant were installed during the summer and were reported to be in operation in November.

The Nizina gold placers are still being worked on a large scale. The Chistochina placer mines are said to have had a very successful season and to have made an unusually large production.

PRINCE WILLIAM SOUND.

The mineral output of Prince William Sound in 1918 is valued at \$3,990,914, about \$677,000 less than in 1917. Five copper mines produced about 15,311,216 pounds of copper and over \$209,000 in gold and silver. Four gold mines in the Valdez and Port Wells districts yielded a small production.

By far the larger part of the copper came from the Beatson-Bonanza mine, which was operated throughout the year on a larger scale than ever before, although the supply of labor from March 1 to November 1 did not average more than 70 per cent of the normal capacity of the mine. The developments for the year include the completion of the new power plant, the extension of the double-hoisting compartment vertical shaft to a depth of 300 feet below the main level, the enlargement of the mill to a capacity of 1,500 tons per day, and the increase of the capacity of the dock bunkers to 5,500 tons. A 500-ton pocket was cut and completed on the 200-foot level, and the development of that level was started.

The Ellamar mine was operated throughout the year but at a reduced capacity, owing to the shortage of labor and shipping. At the Midas mine mining was suspended during the winter, but a small force was retained to carry on development operations. In April the force was again enlarged and regular mining was carried on until September, when all the work except diamond drilling was indefinitely suspended, because it was impossible to ship ore. The Schlosser mine, on Fidalgo Bay, was operated on about the same scale as in 1917.

MATANUSKA COAL FIELD.

The Eska and Chickaloon coal mines were operated throughout the year by the Alaskan Engineering Commission, Sumner S. Smith, resident engineer. At Eska 3,000 feet of main entries were driven. A churn drill was operated during the entire year and 30 holes, with an average depth of 60 feet, were put down. A small lighting and power plant and a hand-picking and cleaning plant were erected and two fans of 25,000 and 50,000 foot capacity were installed. An average of 130 men were maintained on the pay roll. The production was 54,911 tons. At Chickaloon prospecting has been continued throughout the year, and 4,181 tons of coal was mined. An average of 35 men were employed, and 1,700 feet of development work was done. The Baxter mine on Moose Creek was operated until April. Work preparatory to mining was continued by the Chickaloon Coal Co. on leasing unit No. 11. The developments include six cross-cut tunnels aggregating 1,616 feet long, about 300 feet of surface trenching, and several hundred feet of diamond drilling.

COOK INLET-SUSITNA REGION.

The chromite mine at Port Chatham was operated throughout the season, making a somewhat larger production than in 1917. The developments for the year included the construction of a wharf and tramroad and the installation of a stamp mill. Prospecting for chrome ore continued in the Port Chatham and Red Mountain areas. The discovery of chrome ore on Peters Creek southeast of Knik Arm is reported.

In Kenai Peninsula four gold lode mines and several small placer mines were operated. The production of lode gold was considerably greater and of placer gold considerably less than in 1917.

Coal mines were operated at Bluff Point, Port Graham, and Little Susitna River. The Bluff Point coal mine was opened in April and operated throughout the season. The output was taken largely by canneries of Cook Inlet. The Little Susitna coal mine was opened in March and was operated with a maximum force of nine men.

The gold lode mines of the Willow Creek district report a very successful season. The Gold Bullion, Gold Cord, Alaska Free Gold, Mabel, and Talkeetna mines were operated, producing an aggregate amount of gold worth about \$270,000. Development work was carried on and a small mill erected at the War Baby mine on Craigie Creek.

The Cache Creek district, in the Yentna Basin, produced placer gold valued at \$150,000, derived from the operation of 16 hydraulic plants and one dredge, also some lignite, which was used in the operation of the dredge. Electric power will be installed on the dredge in 1919.

YUKON BASIN.

The placer camps of the Yukon Basin, in Alaska, produced about \$4,264,000 worth of gold in 1918. This is a decrease of more than \$2,000,000 from the production of 1917 and is the smallest production since 1904. The decrease was general throughout the region except in some of the upper Yukon districts, and was due to the high cost of operating, the scarcity of labor, and a general hesitation to undertake ventures in the face of future uncertainties. The output of the principal camps was as follows:

Iditarod	\$1, 240, 000
Tolovana	875, 000
Fairbanks	800, 000
Ruby	400, 000
Circle	175, 000
Marshall	150, 000
Hot Springs	150, 000
Koyukuk	150, 000

In the Fairbanks district the production of the placer mines was about \$500,000 less than in 1917. A large number of operators did not undertake any work, and others shut down during the summer. Sixty-eight mines were operated for at least part of the season. The old dredge of the Fairbanks Gold Mining Co. on claim "No. 6 above," Fairbanks Creek, was operated throughout the season. A new dredge of larger capacity, which was installed by the same company on "No. 1 below," Fairbanks Creek, was completed and was expected to begin operations late in the summer.

Lode mining in the Fairbanks district included the operation of seven small gold mines, the value of whose combined output was about \$27,376. There were small outputs from one antimony mine and one or two tungsten mines.

The value of the placed gold produced in the Tolovana district is estimated at about \$875,000, which is about \$275,000 less than in 1917. The decrease is due partly to the working out of claims and partly to scarcity of water and labor. About 35 mines were operated, employing 270 miners.

Operations in the Fortymile and Eagle districts were restricted by lack of water. The production in the Eagle district shows a considerable increase over 1917, due to the operation of two new hydraulic plants.

The production of the Circle district was probably about as large as in 1917, the supply of water having been ample during part of the summer. The dredge on Mastodon Creek was operated throughout the season.

In the Rampart district two mines employing 4 men operated in the winter of 1917-18, and nine mines employing 24 men in the summer of 1918. The value of the total production was about \$24,000.

The Hot Springs district produced placer gold worth \$150,000. Placer tin was also recovered by several operators. There was a general suspension of gold and tin mining because of shortage of labor and high cost of mining. Construction of a large ditch has been started by Howell & Cleveland preparatory to hydraulic mining on the benches of Sullivan Creek. The gravels on lower Patterson Creek are said to have been extensively prospected by drilling, with encouraging results.

The gold production of the Ruby district is reported to be about \$400,000, which is only about half that of 1917. The decrease is due largely to the fact that the Greenstone dredge did not operate, its ground having been worked out in 1917. Some of the smaller operators suspended work on account of high prices of supplies and material.

In the Iditarod district the gold production was about \$1,240,000, compared with \$1,500,000 in 1917.

Scanty information at hand concerning the Innoko and Marshall districts indicates that the general decrease in gold production holds in these districts.

The gold output of the Koyukuk district is apparently about \$150,000, compared with \$250,000 in 1917. Twenty outfits operated, employing 150 miners.

SEWARD PENINSULA.

The value of the mineral production of Seward Peninsula in 1918 was about \$1,195,172, compared with \$2,747,000 in 1917. Of the output in 1918, \$1,108,000 represents the value of the placer gold, and \$87,172 the value of the miscellaneous products, including tin, tungsten, silver, and platinum.

The production of placer gold was less than half that of 1917 and was the smallest since 1898. The decrease was due to labor difficulties, to the high cost of operating, and to unfavorable climatic

conditions, including deep frost, scanty water, and a short season. The production of placer gold by districts was as follows:

Nome.....	\$447,000
Solomon.....	49,000
Council.....	307,000
Fairhaven.....	118,000
Koyuk.....	135,000
Kougarok.....	50,000
Port Clarence.....	7,000

Twenty-one gold dredges operated during the season of 1918, seven less than in 1917. The dredges employed 152 men and produced gold worth about \$466,000, or 42.1 per cent of the total production of Seward Peninsula. Of the dredges, 6 were in the Nome district, 7 in the Council district, 5 in the Solomon district, 2 in the Fairhaven district, and 1 in the Kougarok district.

Twenty-eight underground mines, employing about 177 men, operated in 1918, producing gold worth about \$279,000, or 25.2 per cent of the total production of the peninsula. Of the underground mines, 21 were in the Nome district, 4 in the Fairhaven district, and 3 in the Koyuk district.

Twenty-four hydraulic mines employed about 170 men and produced gold worth \$259,500, or 23.4 per cent of the total production. Of the hydraulic mines, 10 were in the Nome district, 1 in the Solomon district, 4 in the Council district, 5 in the Fairhaven district, 3 in the Koyuk district, and 1 in the Kougarok district.

Fifty-five open-cut mines, other than hydraulic, employed 134 men and produced gold worth \$103,500, or 9.3 per cent of the total production. Of the open-cut mines, 13 were in the Nome district, 6 in the Council district, 11 in the Fairhaven district, 15 in the Kougarok district, 4 in the Koyuk district, and 6 in the Port Clarence district.

The only new strike of the season was made on Poorman bench, Monument Creek, in the Nome district, where gravels carrying about \$32 a cubic yard were discovered.

The total production of tin was much less than in 1917. Only one tin dredge on Buck Creek, in the York district, operated in 1918. A small amount of tin concentrates was also produced by sluicing. Placer tin has been discovered on Potato Creek, which flows northwest from Potato Mountain, and also on Humboldt Creek, tributary to Goodhope River, in the Fairhaven district.

The production of tungsten was less than in 1917. It was wholly incident to the mining of placer gold, no operations being conducted in 1918 for the recovery of scheelite alone.

About 56 ounces of platinum was recovered from the gold placers of Seward Peninsula. Most of this came from Dime Creek, in the Koyuk district, but a small amount was obtained from Bear Creek, in the Fairhaven district.

Little work was done on the lodes of Seward Peninsula in 1918, and no ore was shipped. Considerable work preparatory to mining was done on the Lost River tin lodes and on a silver-lead lode on Kougarok River, where some ore was mined.

KOBUK RIVER.

The gold production of Kobuk River for 1918 is estimated at \$15,000. About 35 men were engaged in mining operations. It is

reported that favorable prospects were discovered on California Creek, a tributary on the Kugaluktuk. About 150 tons of coal was reported to have been mined on the Kobuk about 25 miles above Squirrel River.

UNITED STATES GEOLOGICAL SURVEY.

A suboffice of the United States Geological Survey was opened at Anchorage on July 1, 1918. Its function is to maintain headquarters throughout the year for a resident geologist to work on special problems connected with the mining industry at the region and also to serve as a center from which to distribute survey publications and maps and to collect mineral statistics. The geologist serves, in a consulting capacity, the Alaskan Engineering Commission, to which he gives a large part of his time on coal-mining problems at Eska and Chickaloon. When opportunity presents, he visits the contiguous mining camps to report on each for the annual publication of the survey and to give advice to both operators and prospectors when requested, besides making rock tests and determinations. During the spring of 1919, the geologist in charge served as civilian member of the Navy Coal Commission, appointed to make special investigation of the Matanuska coal fields. The establishment of this office marks the further endeavor of the Department of the Interior to assist in the industrial development of Alaska and should become an important factor in the expansion of mining, more particularly along the line of the Government railroad.

The Division of Mineral Resources of Alaska of the Geological Survey before the war received an appropriation of \$100,000 per annum. This amount was cut to \$75,000. The full amount of the appropriation should now be restored, as no more valuable work to the Territory has ever been undertaken.

WATER-POWER INVESTIGATIONS IN SOUTHEASTERN ALASKA.

The streams of Alaska have been important factors in its industrial growth. The success of placer mining in northern and central Alaska has depended primarily on the water available for hydraulicking and dredging, and in southeastern Alaska water power has long been used by mines, canneries, sawmills, and other industries, although until recently most of the plants have been small.

Since 1906 the United States Geological Survey has made systematic studies of the water resources of Alaska. Investigations with special reference to placer mining have been made in the Seward Peninsula and the Yukon-Tanana region, and reconnaissance surveys for water power have been made about Prince William Sound, Copper River, Kenai Peninsula, and in other parts of southern Alaska.

During the last few years some large water-power plants have been installed near Juneau to supply power for mining and attention has been called to the feasibility of improving other power sites in that region and elsewhere in southeastern Alaska to meet the increasing demand for power to be used in mining, lumbering, and fisheries, and the possible future demand for its use in the manufacture of wood pulp and electrochemical products. Lack of definite information in regard to the quantity of water available and other physical factors

that determine the feasibility of a power site has been one of the principal impediments to development. For this reason a systematic investigation designed to determine the location and the feasibility of water-power sites in southeastern Alaska was begun by the Geological Survey, in cooperation with the Forest Service, in the spring of 1915.

The practicability of a water-power site depends on the quantity of water available, the fall, and the possibility of storing water. Information in regard to fall and storage can be obtained by surveys at any time, but the volume and distribution of flow can be determined only by observations extending over a period of several years, as future flow must be predicted from that of the past. In beginning the investigations, therefore, the collection of stream-flow data was given precedence and constituted the principal work. Some approximate information, however, has been obtained in regard to the elevation above sea level of the stream bed at possible dam sites and area of lakes available for storage reservoirs.

The available power sites in each area were carefully considered, and gauging stations established by the Geological Survey, in cooperation with the Forest Service, at those sites which apparently afforded the greatest opportunities of development. In addition, the Geological Survey and the Forest Service have cooperated with private individuals and corporations in the installation and maintenance of gauging stations.

Records have been collected in accordance with the standard methods used elsewhere in the United States by the Geological Survey. Owing to the inaccessibility of the stations, water-stage recorders were used at all the stations except that on Ketchikan Creek, and cables have been installed from which discharge measurements are made.

Records of flow are now being obtained at 20 gauging stations, as shown by the following list:

- Myrtle Lake outlet at Niblack, Prince of Wales Island.
- Ketchikan Creek at Ketchikan.
- Fish Creek near Sea Level, Revillagigedo Island.
- Swan Lake outlet at Carroll Inlet, Revillagigedo Island.
- Orchard Lake outlet at Shrimp Bay, Revillagigedo Island.
- Shelockum Lake outlet at Bailey Bay, mainland near Ketchikan.
- Karta River at Karta Bay, Prince of Wales Island.
- Cascade Creek at Thomas Bay, mainland near Petersburg.
- Green Lake outlet at Silver Bay, near Sitka.
- Baranof Lake outlet at Baranof, Warm Springs Bay, Baranof Island.
- Sweetheart Falls Creek, near Snettisham.
- Crater Lake outlet at Speel River, Port Snettisham.
- Long River, below Second Lake, at Port Snettisham.
- Speel River at Port Snettisham.
- Grindstone Creek at Taku Inlet.
- Carlson Creek, at Sunny Cove, Taku Inlet.
- Sheep Creek, near Thane.
- Gold Creek at Juneau.
- Falls Creek at Nickel, Chichagof Island.
- Porcupine Creek, near Nickel, Chichagof Island.

In addition to the stations mentioned, records have been secured during previous years at Long Lake outlet at Port Snettisham, Sherman Creek at the Kensington mine, Beaver Falls Creek near Ketchikan, and Mill Creek near Wrangell.

The data collected at the gauging stations, which include a general description of each station and tables showing the results of

discharge measurements and computed daily discharge from date of establishment of station to December 31, 1916, are published in United States Geological Survey Bulletin 662-B and the data for 1917 in Bulletin 692-B. The data for 1918 have been computed and will be published in a subsequent bulletin.

Copies of computed records not yet published and preliminary estimates of flow for any station can be obtained by application to the Director of the United States Geological Survey, Washington, D. C., or to G. H. Canfield, engineer of the Geological Survey, at Juneau, Alaska.

THE UNITED STATES BUREAU OF MINES.

The Alaska Experiment Station of the United States Bureau of Mines, at Fairbanks, is one of 10 similar stations conducted by the bureau throughout the country, the others being located in different mining States. The object of the Alaska station is to render every possible assistance to prospectors, miners, and operators; to conduct experiments and disseminate information with a view to increasing efficiency, preventing waste, and safeguarding working conditions in mining.

Cheaper power is the keynote and a vital requisite to any advance or development of the mining industry of the interior. The station, therefore, is vitally interested in the utilization of the lignite in the Nenana field and has devoted considerable time to the study of the problem during the past year. In addition to designing a dryer and storage bins for the Alaskan Engineering Commission, careful tests of the fuel from the only two operating mines were made under the boilers of the Nenana power plant. A similar test was made with dry spruce wood for comparison. These tests show that the fuel is a good grade of lignite and that it compares favorably with the lignites of North Dakota and Saskatchewan. The comparison with wood indicated that it will require 1 ton of lignite to equal in heating value $1\frac{1}{4}$ cords of dry spruce wood.

In cooperation with the Alaska Chapter of the American Mining Congress, a study was made of the possibility of utilizing the lignite in a central power plant at the coal field and transmitting power electrically to the various mining districts. The details of such a project were carefully worked out, and a report has been prepared for publication advocating the construction of such a plant.

The station maintains a metallurgical laboratory, where it is possible for the mine owner to secure a test of his ore, which will be useful to him in determining the character of his ore body, which will assist him in selecting suitable machinery for concentrating low-grade ore to make a profitable shipping product, and which will enable him to secure greater efficiency from such machinery as he may have installed.

Among such tests mention should be made of the following:

Recovery of gold from the heavy sands remaining after the clean-up of placer sluice boxes.

The concentration of chromite in a beach sand.

The concentration and separation by flotation of molybdenite in low-grade ore.

The concentration of a gold-bearing antimony ore.

Investigation of tailings from three-stamp milling plants.

For the prospector, the station makes identification tests of mineral specimens submitted to it. There is no charge for this work. These tests show the kind of minerals present in the specimen which have present or possible future economic value and, when requested, information is supplied as to values, market prices, etc.

The station is authorized to make regular custom assays of samples submitted, for which a nominal charge of \$1 per metal per sample is made. This work enables the prospector to secure specific information as to the value of his ore without the delay incident to sending it outside, and the work fills a pressing need of this district.

The station also possesses a technical library and reading room, and a collection of economic minerals known to be present or likely to be found in Alaska. These facilities are at the disposal of the public and have been of no little service.

Both the superintendent and the metallurgist made a number of trips to study the requirements of the various mining districts, to become familiar with the problems and needs and, where possible, to give advice and assistance in mining and metallurgical problems. One of these trips involved a journey by the superintendent as far as Cape Prince of Wales and return, taking in the other mining districts en route.

The establishment of the experiment station will result in undoubted good to the Territory, and it is sincerely appreciated.

FISHERIES AND FUR-BEARING ANIMALS.

The fishing industry has now become probably the most important industry of coastal Alaska. Canneries, salteries, and cold-storage plants are springing up on every hand, but it is feared that the enormous catches of late years will soon result in a noticeable depletion of the fisheries. There have always been lean years and fat years, but the lean years are becoming more lean and the fat years not so fat. Attention has been brought by those not particularly interested in the conservation of our sea resources to the fact that more and more fish are being yearly exported, but they do not draw attention at the same time to the greater number of fishing devices, the larger and more numerous craft engaged in the trade, the deadly floating trap, and the practically uncontrolled stream fishing. Nineteen hundred and eighteen was a banner export year. The salmon pack for 1919 will probably not exceed 50 per cent of that of 1918. Streams which a few years ago teemed with spawning salmon now appear almost barren.

Our fish must be afforded better protection. I am in favor of transferring the entire conduct of the fisheries to the Territory, so that governing laws may be enacted by men familiar with local conditions. The money available for the work of the Bureau of Fisheries is so pitifully inadequate to the purpose that even the limited number of boats and men employed can not operate throughout the entire season. As a consequence, laws and regulations supposed to control almost every operation are continually being violated by both cannery men and independent fishermen.

Herring packing will undoubtedly become one of the prime industries, although I am advised by herring packers that it may become necessary to levy a protective tariff on foreign herring when,

the abnormal German demand for Norwegian herring has been satisfied. I am told that even now Scotch herring are being quoted in the New York market at less than the cost of delivering the Alaska product to Seattle.

If the transfer of the fisheries to the Territory can not be effected, I advocate a most liberal appropriation for the protection of Alaska's fisheries, and this can be done without loss to the Government, as the revenues derived by the Federal Government from the sale of seal and fox from the Pribilof Islands, from confiscated beaver and marten skins, from by-products of the seal rookeries, are many times in excess of all moneys spent on the fisheries in Alaska, and as additional protection is afforded so will additional revenues be collected. At present it is simply another case of Government inefficiency through lack of proper financial support.

CHILD LABOR.

Under the provisions of the act approved February 24, 1919, child labor is prohibited in canneries. This law should be amended as far as Alaska is concerned. Canning is neither an arduous nor unhealthful occupation, and as it is carried on entirely during the summer vacation season, children of an age at which they are given employment in no wise suffer. Many of our boys had been paying their way through college on the wages received at various sea-products establishments. On the native population a distinct hardship is being worked. Native boys and girls formerly working during each season, often the sole support of their incapacitated parents, must remain idle. They can not understand why they are now discriminated against. The boys, instead of becoming early trained in useful occupation, are in constant mischief, and the girls between the ages of 12 and 16, with the inheritance of immorality, are the prey of fishermen and cannery employees. By all means should this law be rescinded for the Territory.

FISH PIRACY.

Starting with the month of June, the robbing of fish traps and the intimidation of watchmen constituted a menace to cannery operations. Apparently a well-organized conspiracy existed for the illicit brailing of traps and for the disposal of the plunder. It was estimated that at least 20 boats were engaged in the unlawful practice. After considerable delay, during which time the fish pirates were particularly active, authority was received from Washington to proceed energetically. Launches and special deputies were employed, and several arrests were made. The Territory, by extending assistance to the Bureau of Fisheries, was able to obtain needed evidence. The naval patrol was actively engaged at all times, and rendered valuable preventive service. Fish piracy, for this year at least, has been broken up.

BUREAU OF FISHERIES.

I am indebted to the Bureau of Fisheries for the following complete statement:

The fisheries industry of Alaska as a whole showed a very satisfactory increase in 1918 over 1917. The work of the bureau in enforcing the Federal laws and regulations was considerably expanded, and investigations were

undertaken to determine the extent to which it might be necessary to limit commercial fishing in certain localities. During the fiscal year 1919 restrictions were imposed on fishing in the waters of southeastern Alaska, in the Copper River, and in the Yukon River.

Further attention was given to the opening up of streams to spawning salmon, and the Fishery Intelligence Service for reporting prices of fish, which was inaugurated in 1917, was continued. A special stream-watchman service was established, five men being stationed at points in southeastern Alaska and five in central Alaska during the active fishing season. Much good resulted from this increase of the patrol force in the enforcement of the laws and regulations, as well as in the prevention of unlawful acts in connection with the fisheries. One more small vessel was added to the bureau's patrol fleet during the summer of 1918, and a number of small boats were chartered for short periods.

Alaska fisheries matters were considered at a number of sessions of the Canadian-American Fishery Conference. Action was taken granting reciprocal port privileges to fishing vessels of each nation. Findings and recommendations of the conference were submitted to the respective governments for appropriate action.

The United States Food Administration exercised supervision over fishery establishments in the season of 1918 for the greater conservation of labor, material, and supplies, particularly tin plate. Licenses were required both for fishermen and for the operation of canneries. Fixed prices were established for raw fish to be paid to fishermen, and for the canned product. A large proportion of the pack was commandeered for military use.

In the session of the Territorial legislature held in the spring of 1919 bills were passed providing new and increased taxation upon fisheries products, creating the Territorial fish commission, prohibiting the pollution or obstruction of salmon streams, and establishing the office of labor commissioner, among the duties of which are the inspection of canneries and fishery establishments in regard to sanitary aspects of their operation as affecting laboring classes.

SALMON HATCHERIES.

In the fiscal year 1919, the propagation of salmon in Alaska was carried on at four fish-cultural stations—two operated by the Government and two by private interests. In the fiscal year 1918 there were released from the privately owned hatcheries 23,712,000 red salmon fry, for which, at the rate of 40 cents for each 1,000 fry, the owners were entitled to a rebate of \$9,484.80 in Federal license taxes on canned product.

In the season of 1917-18 the total number of young red, or sockeye, salmon liberated was 90,390,200, of which number 66,678,200 were released from Government hatcheries. In the calendar year 1918 the take of red, or sockeye, salmon eggs at Government stations was 101,981,000, and by privately owned hatcheries 40,020,000. In the same period there were also taken 10,062,000 humpback-salmon eggs by Government hatcheries and 3,660,000 at one of the other hatcheries.

NUMBER OF PERSONS EMPLOYED.

The number of persons employed in the fisheries of Alaska in 1918 was 31,213. Of these 17,693 were classed as whites, 5,251 as natives, 1,509 as Japanese, 2,734 as Chinese, 1,338 as Filipinos, 1,709 as Mexicans, and 979 as miscellaneous. The total number in 1917 was 29,481, or 1,722 less than in 1918.

INVESTMENTS IN ALASKAN FISHERIES.

The total investment in the fisheries of Alaska in 1918 was \$73,764,289, of which \$63,901,397, or approximately 86 per cent, was invested in the salmon-canning industry. The investment in 1918 was greater than in 1917 by \$18,826,740. Of the 1918 investment approximately \$34,500,000 was in southeastern Alaska, \$14,250,000 in central Alaska, and \$25,110,000 in western Alaska. Other information in regard to investments is given in connection with the details of the more important subdivisions of the industry.

QUANTITY AND VALUE OF PRODUCTS.

The total value of Alaska's fishery products in 1918, exclusive of aquatic furs, was \$59,099,483. The value of the 1918 products exceeded by \$7,632,503 that

of 1917, which was \$51,466,980. The quantity and value of the various products of the Alaska fisheries in 1918 were as follows:

Quantity and value of products of Alaska fisheries for the year 1918.

Product.	Quantity.	Value.
Canned salmon.....cases..	6,605,835	\$51,041,949
Mild-cured salmon.....lbs..	3,158,400	607,951
Pickled salmon.....bbls..	56,890	1,079,881
Frozen salmon.....lbs..	1,877,922	170,864
Fresh salmon.....do..	4,260,915	336,576
Dry salted salmon.....do..	516,975	47,544
Dried or smoked salmon.....do..	1,400,000	140,000
Canned herring.....cases..	31,719	231,735
Dry salted herring.....lbs..	100,000	1,500
Fresh herring for food.....do..	606,326	6,564
Fresh and frozen herring (for bait).....do..	5,560,035	54,481
Pickled herring (for food).....do..	18,712,690	1,381,008
Herring oil.....galls..	138,012	97,000
Herring fertilizer.....tons..	645	47,250
Fresh halibut.....lbs..	10,491,777	1,315,985
Frozen halibut.....do..	3,337,529	348,866
Dry salted halibut.....do..	40,400	2,835
Canned cod.....cases..	2,336	14,175
Cod.....lbs..	13,950,432	942,969
Cod oil.....galls..	50	50
Whale oil.....do..	672,989	421,942
Sperm oil.....do..	338,931	327,420
Whale fertilizer.....lbs..	2,069,600	74,255
Whalebone.....do..	8,223	1,644
Whale ivory.....do..	866	216
Whale meat.....do..	148,000	7,400
Beluga hides.....do..	2,500	1,250
Clams.....cases..	43,575	214,504
Canned trout.....do..	2,641	24,568
Fresh trout.....lbs..	60,218	6,575
Frozen trout.....do..	9,500	768
Pickled trout.....do..	21,000	1,773
Fresh, frozen, and pickled sablefish.....do..	1,336,039	67,351
Red rockfish.....do..	338,669	12,186
Crabs.....doz..	720	1,440
Canned shrimps.....cases..	624	3,200
Fresh shrimps.....lbs..	48,204	10,806
Pickled atkafish.....do..	7,850	645
Miscellaneous fresh fish.....do..	246,968	7,696
By-products, oil.....galls..	4,624	4,624
By-products, fertilizer.....lbs..	1,368,000	35,423

THE SALMON INDUSTRY.

A very material increase occurred both in quantity and value of products in the salmon industry of Alaska in 1918. As in previous years, the value of the output was several times that of all other fishery products combined. In 1918, for the first time, salmon were taken commercially to a considerable extent in the Yukon River.

The principal methods of taking salmon are by gill nets, seines, and pound nets or traps. There were 838 seines in operation, the aggregate length of which was 131,127 fathoms; 4,367 gill nets, measuring 479,112 fathoms; and 552 pound nets or traps.

In 1918 the total number of salmon taken in Alaska was 101,454,688. The take by species was as follows: Coho, or silver, 2,911,681; chum, or keta, 14,160,818; humpback, or pink, 48,316,362; king, or spring, 727,762; red, or sockeye, 35,338,065. The total take in 1917 was 92,600,495, or 8,854,193 less than in 1918. Comparing the take by species, more chums, humpbacks, cohos, and kings were taken in 1918 than in 1917, while the take of reds was greater in 1917.

Salmon canning.—The value of the output of canned salmon in

1918 represented about 95 per cent of the value of the total products of the salmon industry. The investment in the salmon-canning industry amounted to \$63,901,397, of which \$28,971,126 was in southeast Alaska, \$11,960,681 was in central Alaska, and \$22,969,590 in western Alaska. The total investment in 1917 was \$46,865,271, or \$17,086,126 less than in 1918. In each of the three sections mentioned there was a larger investment in the salmon-canning industry in 1918 than in 1917. The number of persons engaged in 1918 was 26,502, an increase of 3,152 over 1917. The output of canned salmon in 1918 consisted of 6,605,835 cases, valued at \$51,041,949, as compared with 5,947,286 cases in 1917, valued at \$46,304,090. The pack and value according to species in 1918 were as follows: Coho, or silver, 218,958 cases, valued at \$2,004,979; chum, or keta, 1,364,960 cases, valued at \$8,562,872; humpback, or pink, 2,438,954 cases, valued at \$16,068,456; king, or spring, 49,226 cases, valued at \$485,295; red, or sockeye, 2,533,737 cases, valued at \$23,920,347. In 1918 there were operated in the salmon industry 135 canneries as compared with 118 in 1917.

Mild curing of salmon.—The mild-cured salmon industry showed a slight increase in production over that of 1917; and with the establishment of normal conditions following the war its former markets in Europe will again be open to this product. With the exception of 40 tierces, all of the 1918 pack came from southeastern Alaska. The number of plants operated was 12 and the total investment in the industry was \$786,342. The number of persons employed was 461. The total product of mild-cured salmon amounted to 3,948 tierces, or 3,158,400 pounds, the value of which was \$607,951. Of this output 3,773 tierces, valued at \$591,602, were of king salmon.

Pickling of salmon.—There was a material increase in the production of pickled salmon, though but 27 salteries were operated as against 37 in 1917, the increase being principally in connection with the operations of cannery companies in western Alaska. The investment in the industry was \$1,362,957 and the number of persons employed was 815. The output consisted of 56,890 barrels, or 11,378,000 pounds, valued at \$1,079,881. In 1917 the output consisted of 36,390 barrels, valued at \$590,497.

Other salmon industries in 1918.—The output of frozen salmon in 1918 was 1,877,922 pounds, valued at \$170,864. In 1918 there were shipped from Alaska 4,260,915 pounds of fresh salmon, valued at \$336,576. In addition, it is estimated that 500,000 pounds of fresh salmon, having a value of \$50,000, were consumed locally in the Territory. A total of 516,975 pounds of salmon, valued at \$47,544, was dry-salted in southeastern and western Alaska.

Exact statistics are not available as to the amount of salmon dried and smoked. A conservative estimate indicates that in the Yukon River region approximately 1,400,000 pounds of salmon, valued at \$140,000, were so prepared by Indians and whites for food for themselves and their dogs. Salmon waste products yielded 4,624 gallons of oil, valued at \$4.62½, and 684 tons of fertilizer, valued at \$35.423.

HALIBUT.

The halibut industry of Alaska dropped from second to third place in 1918, the value of the product being exceeded by that of

the herring industry. In 1918 the investment in the halibut industry was \$2,607,792. In 1917 it was \$2,200,987, or \$406,805 less. The number of persons employed in 1918 was 1,186. The total production of halibut credited to the Territory was 13,869,706 pounds, valued at \$1,667,686. Considering the Pacific coast as a whole, the halibut industry showed a marked decline in 1918 as compared with the previous year. The total take in 1918 was only about 40,000,000 pounds, as against more than 50,000,000 pounds in 1917. Of the total catch, it is estimated that nearly one-half came from banks off the Alaskan coast, although the reports available give Alaska credit for less than 14,000,000 pounds.

COD.

The cod fishery of Alaska maintains a remarkably uniform production year after year. Approximately two-thirds of the catch of cod is made in Bering Sea, while the remainder is taken chiefly off the southern shore of the Alaska Peninsula. In 1918 the catch in Bering Sea was somewhat less than in 1917, but the shore-station catch during the winter was in round numbers 1,000,000 pounds more than in the 1917 season, which was sufficient to offset the shortage in the vessel fishery. The demand for cod was strong throughout the year in the States, hence exports were small. The investment in the cod fishery in 1918 was \$1,271,118, which was \$137,147 less than in 1917. The number of persons employed was 697, or 98 less than in 1917. The total production of prepared cod amounted to 14,062,910 pounds, valued at \$957,184. This included 2,336 cases of canned cod, valued at \$14,175.

HERRING.

In 1918 there was a great expansion in the herring industry as a direct result of the exploitation work of the Bureau of Fisheries in 1917 to introduce the Scotch-cure method. This work also indirectly stimulated the operations of those who continued to use the Norwegian method. The output of herring was second in value only to that of the salmon industry in 1918. Special assistants were again sent to Alaska to give instruction in curing and packing herring by the Scotch formula. When the pack was placed on the market it was found, however, that in several instances packers had been careless in their work and a faulty product which could hardly be marketed was the result. An inspection service under Government auspices is being planned to pass upon the quality of herring landed at Seattle. The pack of Scotch-cured herring in 1918 was 38,977 barrels, as against 7,622 barrels in 1917, and of Norwegian-cured herring 49,842 barrels as compared with 13,576 barrels in 1917. The demand for herring fell off somewhat with the ending of the war, but there is an excellent market if the product is properly prepared.

In 1918 the investment in the herring fishery was \$1,802,817, as compared with \$562,002 in 1917, a gain of 220 per cent. The number of persons employed was 884, and the value of products was \$1,819,538. The value of the output in 1917 was \$767,729.

WHALES.

Three shore whaling stations were operated in Alaska in 1918, one of which took white or beluga whales for the hides. It was located on the Beluga River in central Alaska. The other companies were at Port Armstrong in southeastern Alaska, and at Akutan in the Aleutian Islands. Frozen whale meat to the amount of 148,000 pounds, valued at \$7,400, was shipped to the States. The total value of the products was \$834,127, an increase of \$179,255 over 1917. The number of whales taken was 448, or 25 more than in 1917. The investment in the whale fishery in 1918 was \$1,350,971, or \$258,955 less than in the previous year. There were 325 persons employed, or 63 more than in 1917.

MINOR FISHERY PRODUCTS.

The clam-canning industry, represented by an investment of \$247,757, gave employment to 182 persons and produced 43,575 cases of products, valued at \$214,504. The value of trout products amounted to \$33,684. Shipments of sablefish from Alaskan waters aggregated 1,336,039 pounds, valued at \$67,351. The production of red rockfish amounted to 338,669 pounds, valued at \$12,186. Crabs are used to a considerable extent by local residents in various ports of Alaska; the output of the only reported crab fishery was valued at \$1,440. Shrimps were handled, both canned and fresh, the total value being \$14,006. Miscellaneous species of fish were utilized, chiefly ling cod, flatfish, and pollock, in the estimated quantity of 246,968 pounds, valued at \$7,696. Atkafish were pickled in western Alaska to the extent of 7,850 pounds, valued at \$645.

FUR-SEAL SERVICE.

Commercial killing of fur seals was resumed on the Pribilof Islands in the season of 1918. There were taken on St. Paul Island 27,503 sealskins and on St. George Island 7,387, a total of 34,890 skins for the calendar year of 1918.

Two sales of dressed, dyed, and machined fur sealskins from the Pribilof Islands were held at St. Louis in 1918. On April 22 the number of skins sold was 6,100, and the total price bid was \$271,945, the average per skin being \$44.58. At the sale on October 7 the number of skins disposed of was 2,000 and the total price bid was \$103,440, an average of \$51.72. The total number of skins sold during the year was 8,100, and the total amount bid at the two sales was \$375,385.

Another census of the fur-seal herd was taken in 1918. The results showed a substantial increase in the size of the herd over the previous year, and were in keeping with the general upbuilding of the herd since the cessation of pelagic sealing several years ago as the result of the North Pacific Sealing Convention, effective December 15, 1911.

The following table shows the results of the censuses taken in the years from 1912 to 1918:

General comparison of recent censuses of the seal herd.

Class of seals.	1912	1913	1914	1915	1916	1917	1918
Harem bulls.....	1,358	1,403	1,559	2,151	3,500	4,850	5,344
Breeding cows.....	81,984	92,269	93,250	103,527	116,977	128,024	142,915
Surplus bulls.....						8,977	17,108
Idle bulls.....	113	105	172	673	2,632	2,706	2,445
Young bulls (chiefly 5-year-olds).....	199	259	1,658				
6-year-old males.....					11,167	15,397	13,755
5-year-old males.....				11,271	15,494	14,813	11,941
4-year-old males.....	100	2,000	9,939	15,848	15,427	16,631	7,114
3-year-old males.....	2,000	10,000	13,880	18,282	19,402	19,507	9,117
2-year-old males.....	11,000	15,000	17,422	23,990	24,169	26,815	30,159
Yearling males.....	13,000	20,000	23,068	30,307	33,645	38,013	41,596
2-year-old cows.....	11,000	15,000	17,422	23,990	24,215	26,917	30,415
Yearling cows.....	13,000	20,000	23,067	30,308	33,646	38,018	41,608
Pups.....	81,984	92,269	93,250	103,527	116,977	128,024	142,915
	215,738	268,305	294,687	363,872	417,281	468,602	496,431

Owing to the annual increase in the size of the herd, the difficulties grow greater with the taking of each successive census. The plan of the 1917 census was followed closely in the 1918 census. Harems were counted on all rookeries at the height of the breeding season, and enough pups were counted later to ascertain the average harem. With this as a basis, the total number of pups was computed and the other information necessary to secure reliable results was obtained. Slight differences in methods of computation have been adopted as the knowledge of death rates and other factors have required. In all cases it is believed that the figures given are conservative; that is, the herd is actually stronger, if anything, than the figures indicate.

The Bureau of Fisheries also attends to the management of the herds of blue foxes on the Pribilof Islands. The pelts taken in the season of 1917-18, consisting of 90 blues and 14 whites on St. Paul Island, and 602 blues and 5 whites on St. George Island, a total of 692 blues and 19 whites, were sold at St. Louis on October 7, 1918. The 692 blue foxes brought \$57,099.50, an average of \$82.51 per skin; and the 19 whites brought \$1,080, or \$48 to \$60 each.

In the season of 1918-19 there were taken on St. Paul Island 119 blue and 25 white pelts, and on St. George Island 548 blue and 5 white pelts, a total of 667 blues and 30 whites.

Efforts are made each season to catch all of the white foxes in order to eliminate from the herd as much as possible the white strain, which furnishes less valuable skins.

Three shipments of old-seal and sea-lion bones collected by the natives were made in 1918 and sold under contract with the highest bidder. They brought a total of \$2,785.66 in net proceeds, of which \$1,119.80 was paid to the natives for collecting the bones. The balance was turned into the Treasury of the United States.

A by-products plant was constructed on St. Paul Island in 1918 for the reduction of seal carcasses for oil and fertilizer. Experimental runs made late in the fall, just before the migration of the seals, indicate that very satisfactory results may be obtained in the conserving of products heretofore wasted.

MINOR FUR-BEARING ANIMALS.

Fur farms continue to be operated in various parts of Alaska. Much of this work is incidental to other business, but a number of concerns appear to be operating on a commercial basis. Blue foxes and the various color phases of the red fox are the species most extensively raised, though in a few instances reports have been received of experiments with muskrats, marten, and mink. It has been demonstrated that better success is attained with the red fox in corrals, while the blue fox does better when at large, particularly on islands a sufficient distance from other land to prevent escape of the animals by swimming. The propagation of foxes in captivity is destined to become one of the most important factors in the fur industry.

Two changes were made in the regulations for the protection of fur-bearing animals in Alaska in 1918. The open season for taking foxes was extended to April 15 in the region drained by streams flowing into the Arctic Ocean north of the sixty-eighth parallel of north latitude. The use of dogs for pursuing and killing fur-bearing animals for which close seasons exist was also prohibited. Arrangements are being made to secure concurrent regulations regarding the taking of fur-bearing animals in the Provinces of Canada contiguous to Alaska. Considerable difficulty has been experienced in enforcing regulations in Alaska along the border, and it is thought that many evasions occur.

Assistance has been rendered the Bureau of Fisheries particularly in the fur-bearing animal work through appointment by the governor of Alaska of all Territorial game wardens and special wardens as ex officio fisheries and fur wardens. A number of seizures of illegally taken skins have occurred, and convictions have been secured in several instances and fines up to \$100 imposed.

As in previous years, statistics of the shipments of furs from Alaska were compiled by the Bureau of Fisheries. These are obtained from reports made out by shippers and cover all shipments going by mail, express, freight, personal baggage, etc., blanks being furnished by the bureau to postmasters, express offices, and individuals as needed. The Post Office Department cooperates in the matter through the individual postmasters who indorse and forward the reports of all shipments by mail. Cooperation is also given by the customs service in regard to shipments made otherwise than by mail.

In 1918 the value of the furs shipped from Alaska, including those from the Pribilof Islands, was \$2,288,170, as compared with \$1,338,600 in 1917, and \$1,143,600 in 1916. The greater part of this increase is in the value of the larger take of sealskins on the Pribilof Islands.

The following table shows details as to the quantity and value of furs shipped from Alaska in the period from November 16, 1917, to November 15, 1918, with the exception that the figures for the fur-seal skins are for the calendar year 1918:

Furs shipped from Alaska in year ended November 15, 1918.

Species.	Number of pelts.	Average value.	Total value.
Bear:			
Black.....	1, 164	\$15. 00	\$17, 460. 00
Brown.....	35	12. 00	420. 00
Glacier.....	35	30. 00	1, 050. 00
Grizzly.....	42	20. 00	840. 00
Beaver.....	1 109	21. 00	2, 299. 00
Ermine.....	9, 183	1. 50	13, 699. 50
Fox:			
Black.....	6	150. 00	900. 00
Blue.....	740	85. 00	62, 900. 00
Blue, Pribilof Islands.....	692	82. 51	57, 099. 50
Cross.....	1, 704	50. 00	85, 200. 00
Red.....	12, 232	28. 00	342, 496. 00
Silver gray.....	440	140. 00	61, 600. 00
White.....	4, 631	40. 00	181, 240. 00
White, Pribilof Islands.....	19	56. 84	1, 080. 00
Hare, Arctic.....	38	10	3. 80
Lynx.....	7, 692	26. 00	199, 992. 00
Marten.....	1, 023	19. 00	19, 437. 00
Mink.....	24, 572	6. 50	159, 718. 00
Muskrat.....	86, 624	1. 20	103, 948. 80
Otter:			
Land.....	1, 647	22. 00	36, 234. 00
Sea.....	1	150. 00	150. 00
Seal, fur, Pribilof Islands.....	30, 819	30. 00	924, 578. 00
Seal, fur.....	9	30. 00	270. 00
Squirrel.....	153	. 02	3. 06
Wolf.....	207	18. 00	3, 726. 00
Wolverine.....	846	14. 00	11, 844. 00
Total.....			2, 288, 170. 66

¹ Confiscated skins. It is unlawful to kill beavers in Alaska.

² Checked against affidavits permitting shipments. It is unlawful to kill marten in Alaska.

³ Found dead.

⁴ This is total number of skins shipped; total number seals killed was 34,800.

⁵ Confiscated skins.

THE LEASING OF ISLANDS FOR FUR FARMING.

The Department of Commerce has authority to lease certain Alaskan islands for fur-farming purposes. On June 30, 1919, the following islands were held under such leases: Middleton, in the Gulf of Alaska; Little Koniuji, Shumagin Group; Pearl, one of the Chugach Group; Chirikof, southwest of Kodiak Island; and Marmot Island, east of Afognak Island.

TERRITORIAL FISH COMMISSION.

The Territorial legislature of 1919 provided for the creation of a fish commission and the establishment of a hatchery. For this purpose the sum of \$80,000 was appropriated.

Experiments made by the Alaska Fish and Game Club along novel lines, have led those interested in fish culture to believe that better results can be obtained than those procured under the established systems. The Territory proposes to continue these experiments. A small hatchery has been installed in Juneau and a suitable boat chartered for the taking of eggs and the transportation of the hatchery employees. It is planned that 5,000,000 eggs shall be taken, brought to the eyed stage, and then planted in the gravel bars of protected streams and lakes. Fry thus hatched will have the habits and instincts of wild fish and it is thought will be better able to elude the predatory fish found in great quantities wherever hatchery fry are released.

Part of this appropriation is being utilized in clearing obstructions from salmon-spawning streams. All employees will be appointed ex officio Federal fish wardens to assist in maintaining the fishery regulations and for the better cooperation with the Federal authorities.

AGRICULTURE.

Many parts of Alaska contain land on which farming can be successfully followed, provided markets can be procured for the products. In the Tanana Valley farming has long since passed the experimental stage. In the Matanuska Valley splendid results, particularly with vegetables, have been obtained. In southeastern Alaska vegetables and the small berries are grown. Particularly near Fairbanks does one find well-laid-out and productive farms. There are 93 homesteads in the district, totaling 22,613 acres. For the year 1918 a market for practically all products was found in the vicinity, but with a diminishing population and increased acreage the farmers may be faced with the marketing problem. A small flour mill has been bought for the Department of Agriculture's experiment farm, and many of the farmers are availing themselves of the opportunity of grinding flour from their own wheat. In a few years the Fairbanks district will be enabled to furnish wheat for the entire Yukon Valley.

The farmers, however, need assistance. They need money on long-time loans with which to purchase equipment and to clear land. Some form of the farm-loan act should be extended to bona fide farmers in Alaska. I should like to suggest to the Department of Agriculture that legislation be procured to enable them to distribute beef and milch stock to the farmers on long-time payments.

There will always be a great demand for beef in the Territory, and perhaps the department could use their experimental farms as distributing centers and keep thereon bulls of the best breeds for the purpose desired. The technically and practically trained officials of the States Relations Service in Alaska tell me that there is no better way to make farming profitable. Nearly all the homesteaders have started in with practically no money for investment, and so can not stand the initial expense. There can be little possibility of loss to the Government, as the heads of the experimental farms can be designated custodians of the cattle until payment in cash or in kind has been made. Prosperous farmers do more toward stabilizing social conditions than any other class and should be encouraged to the utmost of our ability.

Markets should be found for those localities where a mining population has not created a local demand. I speak now more particularly of the Matanuska Valley. Until the Matanuska coal fields have been opened up to the employment of many miners, the farmers, unless supplied with cattle as suggested, will not be able to sell their product. In fact, many have already become discouraged and moved away. I suggest that the Alaskan Engineering Commission grant such rates on the Government railroad as will allow them to ship produce to Seward and compete with Seattle in the towns of Prince William Sound. At present it is said that railroad plus steamer rates will not allow such competition.

The possibilities of dehydration, the production of potato meal, canning, and other forms of preparing the raw material should be care-

fully studied and aided in connection with the promotion of traffic revenue.

To assist the farmers, good roads should be furnished. The conditions of both the Territorial and Federal road funds is such that the entire appropriations are now needed for maintenance and little new work can be undertaken until larger sums are available. The farmers must have roads if they are to operate to advantage.

EXPERIMENT STATIONS.

The specific task assigned to each of the five agricultural experiment stations, operated under the States Relations Service, has been detailed in my report for 1918. The following additional data has been furnished by the agronomist in charge for Alaska:

The work at the Alaska experiment stations has progressed satisfactorily during the past year. The clearings have been extended at all stations, but particularly at Rampart, Fairbanks, and Matanuska. At the latter station 15 acres were cleared prior to June 30 this spring. At Rampart 20 acres have been added to the area under culture, and at Fairbanks the cultivated area has also been extended. At the interior stations the snow disappeared early and seeding was begun in the early part of May, but the weather continued cold until the latter part of June. For the last six weeks growth of grains of all kinds has been rapid and satisfactory. The grain hybridization at Rampart is continuing and also the pending tests with alfalfa and vetches. Winter wheat did not survive the weather. We have as yet not found a wheat that can stand the winters of the interior. Winter rye survived in part, but it was killed in places where the snow had blown off. The prospects are now for good crops that will mature early at both Rampart and Fairbanks. More buildings are needed at both of these stations, and estimates have been submitted for their erection.

At Kodiak the herd is now doing well. An experiment in raising healthy calves from tubercular parents has proved to be a complete success. When certain of the cattle at Kodiak were found to be tubercular a division was made between the good and affected animals, the latter being kept by themselves 15 miles from the sound herd, but they were bred and treated like sound cattle. Many calves have been dropped, and out of 11 calves, the products of this percentage, only 1 has given symptoms that might be considered suspicious. The others were healthy without a question.

This is a very important experiment. It demonstrates that it is not necessary to kill an animal because it reacts to the tuberculin test, but such animals must be isolated, and the calves they drop must be fed on sterilized milk. This has been done with the above result.

Dr. B. C. Parker, who recently became attached to the staff of the Kodiak station, has, with the consent of the Department of Agriculture, been sent to the Fairbanks region to test the dairy cattle, which produce milk for town use, for tuberculosis. It is a useful work and a step toward eliminating all diseased animals in the Territory.

A young Galloway bull has been purchased to head the herd of Galloways at Kodiak, and a purebred Lincoln ram has been purchased for use in improving the sheep at that station. The Kodiak and Matanuska sanitary stock barns will be built this summer, and the work is now in progress.

At the Sitka station the spring has been late and cold, and it was only during June that vegetation began activity. The strawberry work, looking to the development of better and harder varieties than those obtained from the outside, is progressing successfully.

A large number of settlers in all parts of the Territory have requested nursery stock of the station and have been supplied with hardy fruit bushes and with some early-maturing young apple trees; also rhubarb, horseradish, and other things that we could supply. The object is not only to ascertain how these things will prosper in various sections, but also to introduce them to the settlers and thus in a measure enable them to supply their local needs in small fruits. At this writing the outlook is that we shall have a prosperous season from an agricultural standpoint.

As a matter of interest to wheat growers the analyses made by the plant chemical laboratory of a sample of graham flour grown and milled at Fair-

banks and of bread made therefrom, are submitted in comparison with standard flour:

		Graham flour.	Standard flour.
Water	per cent.	11.62	
Ash	do.	1.84	
Nitrogen	do.	2.41	
Absorption		60	56.4
Maximum expansion		620	850

		Graham bread.	Standard bread.
Volume	inches.	14 by 11	15½ by 11½
Texture		97	98
Elasticity		98	98

Measurements over the top in two directions.

From the analyses you can see that this flour makes a very good loaf of bread. In fact, it is one of the best whole wheat or graham flour breads we have had occasion to make.

PUBLIC LANDS.

The records of the surveyor general's office show that during the fiscal year ending June 30, 1919, 18 townships, whole and fractional, were approved—11 on the Seward meridian and 7 on the Fairbanks meridian.

There have been surveyed in Alaska, to this date, 134 townships, whole and fractional—82 on the Seward meridian, 39 on the Fairbanks meridian, and 13 on the Copper River meridian.

The approximate area of the unappropriated public lands in Alaska is 354,281,760 acres, and from authentic sources it is estimated that fully one-fifth of the area is tillable and pasture lands, capable of supporting a large agricultural population.

The extent of the public surveys thus far made in Alaska is a negligible quantity in comparison with what remains to be surveyed.

During the present season surveys are being made along the Cook Inlet coast of the Kenai Peninsula, north of Kachemak Bay, and in the Chilkat Valley in southeastern Alaska.

There are many small agricultural settlements in close proximity to the larger towns and mining centers, where a ready market for the products is found, that should be surveyed so that the owners may have title to their lands without the expense of private survey.

The act of Congress approved June 28, 1918 (Public, No. 180), provides for the survey of homesteads on unsurveyed lands without expense to the entrymen. When this becomes generally known, there will undoubtedly be many applications for surveys. To date instructions for the survey of two such homesteads have been issued.

To prevent conflicts with surveys of trading sites and other private claims, as well as complications with other Indian claims, the policy of surveying Indian allotments (under act of May 17, 1906) should be renewed.

Owing to the far-reaching prejudice against the Forest Service and to delay incident to survey, clear listing, etc., there has not been the amount of settling on lands within forest reserves that could be hoped for, although modern forest administration shows a yearly improvement. In the interest of Territorial development, it is to be regretted that all authority in the matter of homesteads is not vested in the General Land Office, thereby avoiding confusion,

overlapping authority, delay, and often the ultimate discouragement of the prospective settler.

In my last annual report I recommended the reorganization of the General Land Office so as to have one office in Alaska that can speak authoritatively. In the present system every land claim becomes practically the subject of consideration by four different branches of the bureau. I renew my recommendation for bureau centralization. This can be done in one of several ways. As a start the office of the surveyor general can be abolished with a considerable saving to the Government, and his duties delegated to either the supervisor of surveys or to the chief of the field service, to be handled with a minimum office force. The surveyor general is ex officio secretary of the Territory. At least these two offices should be separated, and the latter office be filled either by presidential appointment or made elective. There is nothing in common in the two positions.

NATIONAL FORESTS.

There are two great national forests in Alaska—the Chugach, comprising 5,417,852 acres, and the Tongass, comprising 15,449,717 acres. A corporation which has made extensive study of the forest possibilities advises me that not more than 10 or 15 per cent of the Tongass Forest is timbered. On May 2 and August 16, 1918, 199,680 acres were temporarily withdrawn from the public domain near Lituya Bay under the fiction of being needed for airplane spruce. An officer in the Washington office of the Forest Service advises me that this withdrawal is to be made permanent.

I do not believe in national forests for Alaska. The administration is not conducive to development. It is true that a certain amount of money is expended in roads and in cooperative agreements for roads, but if the same provisions could be made to cover public lands, the whole country would be better off. Those interested in the possible manufacture of pulp tell me that the industry would have undoubtedly been established in Alaska if definite terms covering a period of years could have been arranged for, and if the water powers were not subject to a lease revocable at any time. It is hard to gain the confidence of capital when its very existence lies within the changeable whims of a departmental executive. I believe the present officials to be earnest and efficient, and I do not criticize the individuals, for whom I have a sincere regard. Their mistakes are becoming less every year, but unless law is to reign instead of regulation, a change of administration might place in charge a fanatic who, by a stroke of the pen, could easily again bring about the distressing conditions accompanying the withdrawals of 1906.

In my last annual report I suggested that there is no function performed by the Forest Service which could not be performed by the General Land Office. This suggestion still holds good with the exception of road construction, but I believe that the Territory would be better off if all the forests within Alaska were to be restored to the public domain and made free to all settlement and industry. The benefit to be derived from an increased population would offset the sop of moneys spent in the construction and maintenance of roads within the forests. The forestry principle involved is contrary to

our traditional system of government and is setting up a vast feudal domain to be administered for good or evil according to the will of the lord for the time being.

The district forester has kindly furnished the following statistics on forest activities during the past year:

The total receipts for the Tongass and Chugach National Forests for the fiscal year ending June 30, 1919, were \$102,813.71. The total cost of administration of the two forests for the same period was \$43,454.14.

The total number of applications received for forest homesteads on the Tongass Forest is 245, eight of which were received during the past fiscal year. The total number of applications received for lands within the Chugach National Forest is 407, only three of which were received during the past fiscal year. Patent survey is made by the Forest Service free of charge for all national forest homesteads just as soon as the applicant has complied with the homestead law.

On June 1, 1918, an agricultural reconnoissance was begun on the Tongass Forest for the purpose of determining the location and extent of all lands suitable for homestead purposes. This reconnoissance is being continued during the field season of 1919, and such areas as are found more suitable for agricultural than for other purposes will be opened to settlement and entry under the general homestead laws.

There are at present 580 occupancy permits in effect on the Tongass Forest. These permits cover a variety of uses to which national forest lands are made to serve the needs of the domestic and commercial population. Among the many uses are 55 canneries, 69 cabins for which no rental is charged, 4 cold-storage plants, 320 residences for which an annual nominal rental fee is charged, 24 salteries, 8 sawmills, 1 whaling station, and 7 fox ranches. There are 159 occupancy permits in effect on the Chugach National Forest, covering free agricultural uses, canneries, fox ranches, salteries, residences, herring pounds, etc.

On the Tongass Forest there were a total of 429 timber sales made, covering 42,205,000 board feet of saw timber and piling, and 38,403,000 board feet were actually cut during the fiscal year. On the Chugach there were 93 sales covering 5,349,650 board feet; 6,300,990 board feet of saw timber and piling were cut during the fiscal year. In addition to the timber sold on the Chugach, the Alaskan Engineering Commission cut approximately 5,758,000 board feet under free use. Considerable other free use is granted annually to settlers who are privileged to secure what they need for domestic purposes at such points as are most convenient to them.

Improvement work has been continued in the completion of the Stikine trail, the street at Warm Springs Bay, the extension of the Hadley-Kasaan trail to the It mine, and the improvement of a street at Craig. Extensive work is being done by the Alaska Road Commission in cooperative agreement with the Territorial Road Commission at Ketchikan, Petersburg, Portage, and other points, to which the Forest Service is contributing a considerable sum. As funds become available, other minor projects which are needed to improve travel conditions will be completed by the Forest Service, while their proportion of the cost of major projects will be expended under the supervision of the Alaska Road Commission.

The water power investigations continue under the supervision of Mr. G. H. Canfield, United States Geological Survey, in cooperation with the Forest Service. Stream-flow records of the larger potential power projects are now available, covering a period of four years, which afford reliable data for those interested in the development of water power for mining and manufacturing.

The area of the Chugach was reduced by 307,800 acres. This elimination was effected through presidential proclamation dated April 16, 1919. The areas eliminated include a strip of land 3 miles deep, from Kachemak Bay to the Kaslof River, and the larger portion of the surveyed land in the vicinity of Anchorage, containing a considerable proportion of land suitable for agricultural purposes, as determined by an extensive reconnoissance survey conducted by the Forest Service.

To meet the needs of the growing population of southeastern Alaska, several additions were made to existing town sites and a large area at Hyder

platted to accommodate settlers in this new mining district. These surveys are made without charge to residents, who are permitted to occupy the land they select within the surveyed limits at a very nominal annual rental. As the needs of these communities within the forest boundaries warrant, streets are laid out and improved through the expenditure of funds derived from the sale of national forest timber.

NATIONAL PARKS AND NATIONAL MONUMENTS.

Alaska has one national park (the Mount McKinley National Park) and one national monument (the Katmai National Monument).

The Mount McKinley National Park, of approximately 2,200 square miles, has as the central attraction Mount McKinley, 20,300 feet in elevation, the highest known mountain in North America. Its northern slopes embrace some of the greatest breeding grounds of game in Alaska, where it is no unusual sight to see herds of woodland caribou of from 200 to 1,000 animals, and sheep in bands of several hundred, while moose and bear are found in more limited numbers.

The park will serve a most useful purpose in the protection of game animals and, when the Government railroad is completed into the Broad Pass district, will be readily accessible to tourist travel. Unfortunately, to date there has been no appropriation made available for marking the park boundaries, building trails, and for the protection of game. I have kept one warden as near the park as possible, but there should be rangers constantly on duty, and they should be active more particularly during the open season. Game, if afforded absolute protection in the park, will multiply rapidly, and the overflow will be a permanent food supply for the mining population between the Tanana River and the Alaska Range. I trust that the estimates submitted by the National Park Service may receive favorable consideration.

The Katmai National Monument, a reservation of approximately 1,700 square miles, surrounds the volcano, Mount Katmai, which "blew its head off" in 1912 and deluged the surrounding country with ashes. For a time the heavy fall of ashes put a stop to agriculture on Kodiak and the surrounding islands, while the very fine ash remained in the air for weeks and was noted hundreds of miles away.

The monument has been well brought to the attention of the public by expeditions sent in by the National Geographic Society, which has featured "the Valley of Ten Thousand Smokes." The valley is evidently a wonderful freak of nature, being covered for miles with spouting fumaroles and a myriad of steam jets. I doubt, however, if the withdrawal serves any purpose, as it is hardly probable that tourists can ever be drawn there in any number, due to difficulties of travel and transportation, and already miners having prospects within the reservation are becoming apprehensive regarding the possibility of not being able to perfect title to their claims, particularly in view of the almost insurmountable difficulties encountered in other withdrawals. Mount Katmai and the "Valley of Ten Thousand Smokes" themselves can not get away and will never be of any commercial use, except, perhaps, that the sulphur deposits may at some time be in demand. Hence it seems rather premature to withhold 1,700 square miles from exploration and possible development.

GOVERNMENT RAILROAD.

During the fiscal year ended June 30, 1919, the Alaskan Engineering Commission reports the following progress on the Government railroad:

The uncompleted gap along Turnagain Arm, between Seward and Anchorage, was closed by the connecting of steel on the afternoon of September 10, 1918. On the main line north of Anchorage the track has been extended to Talkeetna, which is mile 227 from Seward. As stated in last year's report, the branch line, 37.7 miles in length, extending from Matanuska Junction to Chickaloon in the heart of the Matanuska coal fields, has been completed and is in operation. It is, therefore, possible now to travel or ship freight via the Government railroad from Seward, on Resurrection Bay, to Talkeetna, a distance of 227 miles, and to Chickaloon, in the coal field.

True, the complete rehabilitation of that portion of the line from Seward to mile 71, Kern Creek, known as the Alaska Northern Railway, has not yet been accomplished, but great progress has been made in that direction. While it is not yet ready for heavy traffic, much has been done toward making it safe by the elimination of decaying trestles, bridges, etc.

Between Talkeetna (mile 227) and the crossing of the Susitna River (mile 265) 27 miles have been graded and are ready for track. The remainder of the distance between these two points has been cleared and is ready for grading.

The dock at Seward has been extended some 60 feet to take care of additional business. Material has been gathered for the erection of snowsheds in the vicinity of mile 54, which work will be pushed during the present season. It is hoped this will obviate the closing of the line by snowslides, which occurred very early the past winter, due to the unusually heavy fall of snow.

The work on the wharf facilities at Anchorage to permit ships of considerable draft to dock was continued during the year, some 200,000 cubic yards of material being dredged, and 2,600 feet of dock approach being constructed.

Good progress has been made on the Fairbanks division of the system. The line change partly necessitated by the rampage of Lost Slough, mentioned in last year's report, has been accomplished, and the track has been extended southward from Nenana a distance of 48 miles, to a point on the west side of the Nenana River, where coal is being mined in appreciable quantities.

Between Nenana and Fairbanks, the narrow-gauge line to be used temporarily in connection with the Tanana Valley Railroad and then converted into standard gauge, has been extended to a point 9½ miles south of Happy Station, making available an increased supply of wood for use as fuel in Fairbanks and vicinity. Before the "break-up" in the Tanana River, equipment and supplies were moved across the river from Nenana, and the task of completing the line between Nenana and Fairbanks is being vigorously attacked. At the end of the fiscal year 2½ miles of track had been laid in this vicinity, and at the present writing this amounts to more than 3 miles. The clearing on the remaining distance between Nenana and Fairbanks is done, most of the crossings are driven, and the grading is now under way. Necessary reconstruction work was done during the year on the Tanana Valley Railroad. A resurvey of this entire line was undertaken to determine upon improvements looking toward safety and economy in operation.

While the railroad project was greatly handicapped for labor during the latter part of the 1918 season, the end of the war, with the return of the soldiers and others from industries in the States, has changed this condition very materially. The end of the fiscal year 1919 found the commission with about 2,200 men on the pay roll, and no men in the vicinity unemployed. Until additional appropriations are made for the work this force can not be increased.

To the very end of the war the commission employees remained enthusiastically loyal to the Government, contributing liberally to the Red Cross and kindred organizations and making large subscriptions to the Liberty loans. Even in the Victory loan, without the incentive of actual hostilities to spur them on, 1,452 employees subscribed a total of \$196,700.

I earnestly recommend that Congress give this great constructive work the fullest possible support. Owing to delays in making the always inadequate appropriations available and to the uncertainty of congressional action until the best part of the working season has passed, the cost of the railroad has been increased by several millions of dollars. A great deal of hardship, both among the laborers and merchants in the railroad towns, has resulted, due to long periods of inaction, which could have been avoided had sufficient funds at all times been available. I believe I am perfectly safe in stating that, could construction have been carried forward so as to take best advantage of the seasons, the railroad would now be completed, within the estimate, from Seward to Fairbanks, and that the industries of the country tributary to the railroad would now be well on the way to permanent establishment.

The completed portions of the road are well up to the best standards of engineering practice, and attacks made upon the management can safely be ignored and the unbiased favorable reports of visiting engineers accepted.

It is very probable that even after completion the railroad will not immediately operate at a profit, but the deficiency will be more than offset by the new and taxable industries established along the route. Alaska has proved immensely profitable to the Government along the lines of established transportation. The country along the railroad will prove no exception.

THE ALASKA INSANE.

Under a contract with the Secretary of the Interior the legally adjudged insane of Alaska are cared for at the Morningside Hospital, near Portland, Oreg., the contractors being the sanitarium company. The present contract expires on January 20, 1920. A new five-year contract with the same company has been executed, at a price of \$41.25 a month per patient, which, in view of the rapid rise in the price of supplies, equipment, wages, etc., will be entirely inadequate. Twice since the signing of the armistice it has been necessary to raise salaries. In addition to the hardships encountered by the contractors due to high costs, beginning January 1, 1920, under a ruling of the labor commissioner for Oregon, three shifts will be required in the nursing and attending staffs. Although such changes are proper and approved by all, rates must be increased to meet the added expense. Steps should be taken to afford relief to the contractors so that the inmates of the sanitarium may not suffer in any manner.

The sanitarium company has a very considerable investment at Morningside and shows every evidence of being more than willing to comply with all suggestions for the betterment of the surroundings of the patients. At my request, recreation annexes to the wards have been built in and other betterments effected.

An inspection was recently made by officers of the Public Health Service, who, I believe, have made a favorable report. The doctor in charge reports that in the 15 years in which they have cared for 794 patients from Alaska there has never been a case of suicide, homicide, or serious casualty. During the recent epidemic of influ-

enza the establishment escaped without a single case, although there were over 2,000 deaths in Portland.

While the insane of Alaska are receiving the best care possible under the circumstances, still it seems to me that the unfortunates of the Territory should be cared for in a Federally-conducted asylum within the Territory. There are a number of hot springs in Alaska where, if the Government could build a model hospital, it might be possible to give such treatment as would cause a more speedy return to normal condition.

On June 30, 1919, there were 203 patients in the hospital, a decrease of 8 over the fiscal year 1918. There were 51 receptions during the year, 36 discharges, and 23 deaths. During the 15½ years that the sanitarium company has received the Alaska insane there have been 794 receptions, 392 discharges, and 199 deaths.

WASHINGTON-ALASKA MILITARY TELEGRAPH SYSTEM.

No more constructive work in Alaska has ever been undertaken than the installation of the military cable and telegraph lines. In connection with the Naval radio service Alaska is slowly receiving the benefits of telegraphic service. The present able and far-seeing chief of the system is fully imbued with the necessity and desirability of extending the system, but is handicapped by lack of funds with which to perform new installations. There are still considerable parts of Alaska which are out of communication except by the old tortuous boat or sled travel which, if for no other reason than for judicial needs, should be served. If Government business is taken into account as an asset to the lines the operation is practically self-supporting, and there is little reason to believe that new stations could not soon be placed in the same category. There is no inducement to private enterprise to enter the field in competition or in cooperation, so it logically devolves upon the Government to meet the growing needs of the population. The volume of business is constantly increasing. I have not complete operating costs, but from reports of the receipts of two years, namely, 1915 and 1918, it is shown that in 1915 the total business handled amounted to \$293,744.68, while in 1918 it had increased to \$570,198.64. Owing to slow mail service a very free use is made of the cables and wires in transacting Alaska business.

The officer in charge submits the following information:

Number of cables operated by the system in Alaska.....	16
Total mileage, including Seattle-Sitka cable (statute miles).....	2, 610, 671
Total land-line mileage (statute miles).....	799
Number of Signal Corps telegraph, cable, and radio stations in Alaska.....	46
Number of Signal Corps officers and men in Alaska (approximate)...	185

List of stations.

Beaver Dam -----Telegraph.	Craig-----Radio
Birches-----Do.	Donnelly -----Telegraph.
Chena -----Do.	Douglas -----Cable.
Circle -----Radio.	Fairbanks -----Radio and telegraph.
Copper Center-----Telegraph.	Fort Davis-----Telegraph.
Cordova -----Cable.	Fort Egbert-----Radio.

Fort Gibbon -----	Radio and telegraph.	Nenana -----	Telegraph.
Fort Lisicum -----	Telephone.	Nome -----	Radio.
Fort Yukon -----	Radio.	Nulato -----	Radio.
Gulkana -----	Telegraph.	Paxson -----	Telegraph.
Haines -----	Cable.	Petersburg -----	Cable.
Hogan -----	Telegraph.	Richardson -----	Telegraph.
Holy Cross -----	Radio.	St. Michael -----	Radio.
Hot Springs -----	Telegraph.	Salcha -----	Telegraph.
Juneau -----	Cable.	Seward -----	Cable.
Ketchikan -----	Do.	Sitka -----	Do.
Kokrines -----	Telegraph.	Skagway -----	Do.
Kotlik -----	Radio.	Tiekhell -----	Telegraph.
Koyukuk -----	Telegraph.	Tolovana -----	Do.
Louden -----	Do.	Tonsina -----	Do.
McCallum -----	Do.	Valdez -----	Cable and telegraph.
McCarty -----	Do.	Wortmans -----	Telegraph.
Melozi -----	Do.	Wrangell -----	Cable.

NAVAL COMMUNICATION SERVICE.

There are at present nine radio stations in Alaska, namely St. Paul, St. George, Dutch Harbor, Kodiak, Seward, Cordova, Sitka, Juneau, and Ketchikan. The number of men on duty at all the stations is approximately 100. The number of men attached to the individual stations ranges from 1 attached to St. George to 30 men attached to Cordova.

These stations are to be maintained by the Puget Sound yard on and after July 1 of this year. For this maintenance work a special radio tender, the U. S. S. *Saturn*, is employed. A number of workmen are taken to the several stations to repair existing apparatus and do such new construction work as may be necessary.

The naval communication service handles commercial traffic to any and all points that are served by the radio stations. In many instances the radio service is in competition with the Army cable. The rates have been made the same for both the cable and radio. This uniformity of rates makes it very easy to route the traffic via radio in case of a cable break or by cable in case of a radio breakdown.

In general the Alaskan stations handle mainly commercial traffic and Government traffic of class B. All commercial traffic is domestic count, 10-word minimum. The rates for southeastern Alaska, such as Juneau, Ketchikan, and Sitka are 10 cents a word, 10-word minimum. For Cordova and Seward the rate is 15 cents a word, 10-word minimum. For southwestern Alaska, such as Kodiak, Dutch Harbor and the Pribilofs, the rate is 19 cents a word, 10-word minimum.

All the Alaska stations are spark stations, except that Cordova and St. Paul have both arc and spark installations. It is contemplated establishing in the near future a radio circuit across the North Pacific. This will comprise the four arc stations at Keyport, Cordova, St. Paul, and Vladivostok. When this service is instituted, the Alaskan traffic routes will be greatly increased in importance.

At present all traffic for points east of the one hundred and thirty-eighth meridian are routed through the Astoria-Ketchikan circuit. This is the old Marconi spark circuit. All traffic to points west of this meridian are routed via the Keyport-Cordova arc circuit.

COMMERCE.

The total commerce of Alaska with the United States for the fiscal year was \$117,018,835, as compared with \$131,767,788 for 1918, or a decrease of \$14,748,953. The more important increases and decreases are as follows: The increase in the export value of sea-food products was \$5,144,171, the decrease in the value of copper shipped was \$5,978,824, while the export of domestic and foreign gold and silver from Alaska for 1919 amounted to \$9,308,119, as compared with \$15,134,879 for 1918, a decrease of \$5,826,760.

On imports from the United States the following increases and decreases are shown: Increase on coal, \$33,835; decreases, lumber, \$212,820; liquors, \$414,755; iron and steel, including hardware, \$4,764,759; breadstuffs, \$461,895. The total decrease in shipments from the United States to Alaska amounted to \$8,736,041.

The decrease in the value of copper ore was largely due to the curtailment of operation after the signing of the armistice, when the price of copper fell from its high war value. The large decrease in export of gold and silver is due to labor shortage and the closing of many mines on account of the increased costs of labor, materials, and supplies due to war conditions. The increase in sea foods reported is due both to volume and value on account of the great demand for canned salmon. The decreases in shipments from the United States are due to the curtailment of many of the industries of the Territory on account of labor shortage and high prices on all commodities.

Imports from foreign countries amounted to \$1,334,403 and exports to foreign countries of \$1,074,367, which, added to the total commerce of Alaska with the United States, make the grand total of commerce of Alaska for the fiscal year 1919 reach the sum of \$119,427,605, as compared with \$135,115,025 for 1918.

There is a steadily increasing trade between Alaska and northern Siberia, which promises to become quite a factor when conditions in Russia once more become settled.

Domestic merchandise shipped from the United States to Alaska, 1914-1919.

	Fiscal year ended June 30—					
	1914	1915	1916	1917	1918	1919
Coal.....	¹ \$295,123	¹ \$255,810	¹ \$244,136	¹ \$290,237	¹ \$406,911	¹ \$440,746
Lumber.....	642,611	712,199	1,050,311	1,343,336	1,817,328	1,604,503
Hardware and machinery.....	5,069,453	4,849,353	6,128,826	10,183,517	17,750,680	12,985,921
Provisions.....	5,645,715	5,314,917	6,301,043	8,353,418	8,882,169	7,807,098
Liquors.....	645,890	555,144	659,210	802,471	414,755	.....
All others.....	9,630,668	9,105,186	12,118,785	17,454,639	14,998,332	12,705,761
Total.....	21,929,460	20,792,609	26,502,311	38,427,618	44,280,075	35,544,034

¹ Besides the domestic coal above mentioned, foreign coal was imported to the value of \$108,355 in 1914; \$141,480 in 1915; \$155,259 in 1916; \$280,687 in 1917; \$273,510 in 1918, and \$278,177 in 1919.

Value of merchandise and precious metals shipped from Alaska to the United States, 1915-1919.

	Fiscal year ended June 30—				
	1915	1916	1917	1918	1919
Fish, salmon, canned and other.....	\$18,375,053	\$18,856,625	\$23,229,724	\$43,357,348	\$47,628,910
Fish, all other.....	849,796	772,806	1,603,938	2,701,724	3,574,333
Furs.....	679,850	572,909	711,550	1,205,635	2,367,492
Gypsum.....	100,995	50,500	62,000	19,450	20
Stone, including marble.....	116,930	58,675	110,101	55,916	91,705
Oils, animal.....	298,427	270,503	297,696	737,704	806,235
Ore, copper.....	5,182,004	26,488,288	3,098,190	20,217,635	14,238,811
Tin.....	71,400	79,471	54,147	114,462	96,343
Tungsten.....			54,870	19,550	11,000
All other.....	1,356,015	1,715,640	1,912,989	3,165,990	3,248,210
Total.....	27,089,470	48,965,477	60,135,205	71,595,414	72,088,150
Domestic gold and silver:					
Gold.....	15,348,666	16,195,636	15,409,520	12,416,960	8,623,924
Silver.....	263,606	759,962	683,824	711,755	600,835
Total.....	15,612,272	16,955,597	16,093,353	13,128,415	9,224,759
Foreign gold and silver:					
Gold.....	4,423,622	2,698,303	3,676,385	2,006,362	83,334
Silver.....		11,279	32,236	108	26
Total.....	4,423,622	2,697,582	3,708,621	2,006,470	83,360
Grand total.....	47,075,364	68,618,656	79,937,179	86,730,299	81,376,278

Total commerce of Alaska for the fiscal year ended June 30, 1919.

Shipments of—

Domestic merchandise from the United States to Alaska.....	\$35,544,034
Domestic merchandise from Alaska to the United States.....	71,594,906
Foreign merchandise from Alaska to the United States.....	473,193
Domestic gold and silver from the United States to Alaska...	98,523
Domestic gold and silver from Alaska to the United States....	9,224,759
Foreign gold and silver from Alaska to the United States....	83,360
Total.....	117,018,835

Shipments of—

Merchandise from foreign ports to Alaska.....	1,334,403
Merchandise from Alaska to foreign ports.....	1,074,367
Total.....	2,408,770
Grand total.....	119,427,605

TRANSPORTATION.

Chiefly due to war conditions, transportation to and in the Territory during the past year has been in a most chaotic condition. Steamers have been unable to maintain schedules, and in many instances have entirely cut out former ports of regular call. A great hardship was worked, particularly in many of the districts off the regular lanes of traffic. This was particularly noticeable during the severe epidemic of influenza which swept the Territory. A steamer calling at Kodiak in November left influenza on what was the last voyage for over two months. There was absolutely no opportunity thereafter to send greatly needed supplies and assistance, as, owing to storms, small vessels were unable to cross the Gulf of Alaska to

Seward. The mail contract, handled by a small gas boat, did not provide for service farther east than Kodiak, which was absolutely isolated since the failure of the steamer *Dora* to obtain a renewal of the mail contract on the Seward and Islands run.

The Prince William Sound ports during the winter were intermittently served by the two large steamship companies—the Alaska Steamship Co. and the Pacific Steamship Co., with three regular ships. These had but small passenger traffic and little northbound freight, although full cargoes southbound, principally of ore. The shippers of chrome and low-grade copper ores were unable to obtain space for their product, and when the market price of chrome and copper dropped with the cessation of war demands these small and less powerful shippers were ruined. An Alaskan market had been procured for experimental shipments of Matanuska coal, but space could not be procured, or, when promised, was canceled.

Based on war-time valuation of ships, the capital stock of the steamship companies was increased, necessitating a ruinous increase in tariffs to provide high dividends after income taxation had been deducted. Low-grade copper mines, previously shipping at a profit, were now operating at a loss, even when transportation could be procured at all. The steamship companies also were not without grievance. Operating costs had increased by leaps and bounds and there was practically no income from the transportation of mails. The Government had commandeered a number of vessels of the Alaska Steamship Co., and, according to their statement, withheld the agreed-upon charter price of some \$407,000. This amount was not taken into their accounts as an asset, but held in suspense and does not enter into consideration in the balance sheet, making it necessary to procure dividends from a decreased number of operating ships, although the increased value of the commandeered ships seems to have entered into the increased capitalization.

In March of this year a further increase of tariff was put into effect, due principally to the price of fuel oil, which had increased from \$1.25 per barrel, the old contract price, to \$1.85 per barrel. Tariff increases affected southeastern and southern Alaska, but not Nome and St. Michael.

The industry of the Territory is seriously menaced. As a matter of protection, the legislature of the Territory enacted a law creating a shipping commission, consisting of the governor, the secretary of the Territory, and the treasurer, empowered to investigate traffic conditions, and if no remedial results could be procured to even go to the extreme of establishing a Territorial steamship line, it being considered that to protect the industry of the Territory it might be best to operate such transportation line even at an annual loss. Investigations are now under way by a competent attorney. It is too early to make any statement of findings, but unless relief can be found, the Territory will be retarded in development, except as to such products as are in demand irrespective of price. The large salmon-packing companies are already supplying their own transportation in part, and full-cargo shipments are going in chartered bottoms, thus diminishing the tonnage to be shipped by the commercial lines and presaging perhaps a still further increase in rates to be borne by the relatively small shipper unable to seek outside relief.

It is now rumored that a further rate increase of 20 per cent is to be levied. This the Territory absolutely can not stand. Since April, 1916, rates in part have risen nearly 300 per cent. Each increase causes some industry to cease operation, thereby reducing the total volume of business. Unless the Government or the Territory can come to the rescue in some manner I can hold out little hope for general welfare.

FEDERAL ROADS IN ALASKA.

The Alaska Road Commission, constituted by act of Congress approved January 27, 1905, is composed of three officers of the Army, who report to the War Department through the office of the Chief of Engineers.

The commission was organized "for the maintenance and construction of roads, bridges, and trails," and for the "construction and maintenance of military and post roads, bridges, and trails, Alaska." The total expended for all construction and maintenance to June 30, 1919, is \$4,920,655.67. Of this amount \$2,920,000, or 59 per cent, was appropriated at different times by Congress, and \$2,000,655.67, or 41 per cent, from the Alaska fund. One thousand and thirty-one miles of wagon road, 673 miles of sled road, and 3,223 miles of trail have been constructed and maintained since 1905. Approximately 400 miles of wagon road has a light gravel surface.

A total of \$299,024.26 was expended during the fiscal year ended June 30, 1919. Of this amount \$184,195.15 was for maintenance of existing roads, bridges, and trails, and \$114,829.11 was charged to construction, most of the expense of construction being for extensive improvement of present roads and trails. During the year the mileage was increased as follows: Twenty-five miles of wagon road, 147 miles of trail, and 180 miles of road improved.

While the funds at the disposal of the commission do not permit the construction of so-called "automobile roads," a fairly accurate census of automobiles and trucks in the Territory show 435 machines are being operated.

The congressional appropriations have always been included in the annual appropriations for the support of the Army. The board is required by law to expend the funds received from Congress on projects which are strictly considered as military and post roads, bridges, and trails. The main project coming under this head is the Valdez-Chitina-Fairbanks wagon road and all the various connecting roads and trails. This comprises a system of roads and trails reaching practically every town of importance west of the one hundred and forty-first meridian, with the exception of towns along the Copper River Railroad and a few places along the coast. Mail is carried overland from Chitina to Arctic City and to Caro, above the Arctic Circle; to Eagle on the upper Yukon near the Canadian boundary; to Fairbanks, Fort Gibbon, and lower Yukon points; to St. Michael, Kotlik, Nome, and the surrounding country, terminating at Candle, on Kotzebue Sound. Seward is the southern terminus of branching roads and trails, which join the main system at various points on the Yukon

River. By this route Anchorage, Knik, Cache Creek, Ophir, Iditarod, Lewis, Kaltag, and many other districts are reached. The entire connected system has a total length of 4,602 miles.

In addition to this connected system, there are 288 miles of shorter local roads and trails in various other parts of the Territory.

The appropriation granted for 1920 is \$100,000, amounting to an allowance of \$20 per mile, which makes it impossible for the commission to take care of the ordinary maintenance, and also makes it necessary to defer maintenance on a great many roads which are of great importance to the people of the Territory. It is hoped that a larger appropriation will be granted next year and the sum of \$719,000 has been requested from Congress, \$604,050 of which is for maintenance, repair, improvement, and extension of present military and post roads, bridges, and trails.

In the matter of expenditure of the Alaska fund, the commission is given more latitude, and allotments are permitted for projects which are not considered as military or post roads. Funds have never been abundant and the commission has not been in a position on this account to undertake a great many projects of merit. The commission is required to maintain present roads, improve these roads as much as traffic conditions and available funds will warrant, and to undertake the construction of new work after the former requirements have been fulfilled.

Prices of labor, supplies, and material are high, and until conditions return to normal and more funds are available the commission will be greatly restricted in extending its present system.

There were formerly four different organizations having charge of road work in Alaska. In addition to the Alaska Road Commission, the United States Forest Service, the United States Bureau of Public Roads, and the Territorial Road Commission were engaged in road work. A large part of the Federal work is now combined, and the president of the Alaska Road Commission, in addition to his duties as such, is in local charge of practically all work under the jurisdiction of the Federal bureaus. This makes a very effective working arrangement, reduces expenses, and insures the maximum benefits from cooperation.

The Secretary of Agriculture has authorized cooperative agreements for the Ketchikan-Wards Cove, the Portage, Petersburg-Scow Bay, Salmon River, Seward-Kenai Lake, and Juneau-Eagle River roads, \$21,000 being allotted by the Alaska Road Commission, \$38,000 by the Territory, and \$94,000 by the Secretary of Agriculture. Additional projects are pending. The Alaska Road Commission is also cooperating with the Territory on work in the second and fourth divisions. On this work the Alaska Road Commission allotted \$19,000 for work in the second division and the Territory \$30,000. In the fourth division the Alaska Road Commission allotted \$13,000 and the Territory \$15,000.

The road law enacted by the last legislature provides for the closest cooperation between the Territory and the Federal road authorities, and when full advantage is taken of the provisions of the law most satisfactory results should follow.

TERRITORIAL ROADS.

In addition to roads constructed and maintained through Federal agencies, the legislature appropriated \$375,000 for the biennium ending March 31, 1921. Under the provisions of the new road law the apportionment to the road districts of the four judicial divisions may be expended under cooperative agreement with Federal agencies. Heretofore there has been no cooperation possible, and funds apportioned to Alaska under section 8 of the Federal-aid road act have been inoperative. Several contracts have been entered into with the Department of Agriculture for the construction of roads within forest reserves, which will undoubtedly prove of great benefit to the country.

The Territory has partly constructed and wholly maintains 241 miles of wagon roads and 232 miles of pack or sled trails. Winter trails are staked across the tundra for the safety of travelers, and relief cabins are erected where travel is dangerous.

NATIVES OF ALASKA.

To formulate a definite Indian policy for Alaska will be a hard and difficult task, particularly where there is found such a great admixture of white blood. Further complexities are found in every community, whether of native or mixed blood, due to different conditions of climate and environment. I have consulted officials of the Bureau of Education, clergymen, missionaries, doctors, and each one has a different suggestion. I doubt if much change can ever be effected in the older generations; hence the greater part of helpful endeavor must be directed toward the education of the young. On the Seward Peninsula, on some of the Aleutian Islands, and along Bristol Bay the terrible influenza epidemic has left an enormous number of orphans. There seems no reason to me why these children can not be trained to useful life away from the igloo, barabara, or hut.

Hereditary disease is much in evidence among practically all of the tribes. In one large village in southeastern Alaska the local physician advises me that the blood of fully 90 per cent of the inhabitants is tainted. Tuberculosis in its various forms is very prevalent. There should be sanitariums established where the various diseases can be isolated and treated. It will not be necessary for special legislation to enforce any needed regulation, as this can be done by order of the Territorial commissioner of health, acting in cooperation with the Bureau of Education. For lack of funds the Territory can not establish the plants needed, nor should it be asked to further care for the natives, but undoubtedly they should receive greater consideration from the hands of the Government than they now do.

A movement is on foot among the younger element of the natives of southeastern Alaska to cast aside old tribal customs and to adopt the manners and customs of the white man. Such a policy should receive every encouragement. There should be more vocational schools where boys can be taught carpentry, boat building, gas and steam engineering, and other useful trades. Graduates of the few vocational schools now build and run for themselves power fishing

craft of all descriptions and compete successfully with the white fishermen. Natives with some education are found as miners, sailors, farmers, and laborers. The Eskimos make good reindeer men and work in the mines and fisheries of Seward Peninsula. In the interior, with only a few exceptions, the natives live, as has their forebears for centuries, by hunting, trapping, and fishing.

A sane Indian policy would consist of, first, the elimination of communicable and hereditary diseases, and, second, training the young to useful trades in the Territory itself. Unless the native is made healthy and decently self-supporting, religious and scholastic education is, to a great extent, waste effort.

I do not believe in placing native and half-breed children in schools outside of Alaska, as it has been found that they do not readily become acclimatized. They should have schools near their own homes. I do not think it is demanding too much of the Government in asking that our natives have as much spent on them per capita as do the Indians of the States. Given a proportional appropriation for hospitals and schools, the Alaska natives will gradually become a considerable factor in the industrial development of the Territory. The Territory has been obliged to establish schools for natives and half-breeds in certain districts not reached by the Bureau of Education, spending annually about \$30,000 for the purpose, and in other districts natives and half-breeds are admitted to schools on equal terms with white children. The burden of native education should not be placed upon the Territory.

Besides the schools maintained by the Bureau of Education and by the Territory, there are a number of splendid mission schools, the more notable ones being the Sheldon Jackson School at Sitka and the Holy Cross School of the lower Yukon. There are a number of other mission schools of various denominations, with small teaching staffs, as well as several hospitals and orphanages at practically all of which good substantial work is being performed.

The Bureau of Education makes the following more detailed report on native schools and its medical service, as well as reindeer:

ALASKA NATIVE SCHOOL SERVICE.

The schools for native children in Alaska are supported by Federal appropriations under the supervision of the Bureau of Education of the Interior Department. The Territory is divided into five districts, each in charge of a superintendent of schools directly responsible to the chief of the Alaska division of the bureau, whose headquarters are in Seattle. The Seattle office also functions as a purchasing and disbursing office for the service.

During the past year, 65 schools were maintained with a total enrollment of approximately 3,600, the highest monthly average attendance being 2,750. The enrollments in individual schools range from 12 to 169. Primarily because of the difficulty in securing suitable teachers, 6 of the schools operated the previous year, were not opened. Other circumstances besides the general scarcity of teachers during the summer of 1918 caused the closing of these schools. In spite of undeniable increases in costs of all kinds during the war, the bureau's appropriation for the education of these children during the past year was but \$215,000, an increase of only \$15,000 over the \$200,000 received in 1907 and each successive year. Obviously the bureau not only must reduce its expenditures for supplies and materials to the lowest possible figure in order to maintain the school system established but is also very much handicapped in attempting to meet the increased salary schedule necessary to the efficiency of the personnel.

Most of the schools are in native villages, where the school is the center of the village life. The teachers benefit the adult population as much as the children. They must lead the social, industrial, and educational phases of the village. Quite often the teachers are the only source of medical relief the vicinity affords. It will thus be seen that the teachers of these schools must possess considerably more than mere pedagogical ability.

At present the bureau is handicapped in reaching a large percentage of the native population because of the fact that villages usually are quite small and located in isolated sections. Thus but minimum results can be obtained through small schools necessary at maximum costs. However, a creditable showing has already been made, and communities which have had the benefits of these schools are far superior to the less fortunate villages. An excellent illustration of this is found in the fact that of the 123 teachers employed, 23 are natives, practically all of whom received their education in the native schools of Alaska. One of the principal schools in northwestern Alaska, which the bureau was unable to supply with a white teacher, was placed under the care of two native teachers. The situation was handled so successfully that the superintendent of that district recommended that the same plan be followed the subsequent year.

Instances such as these prove that the native people are taking advantage of the opportunities afforded them, and while the natives as a whole have quite a way to go before they can successfully compete with their white neighbors, it is gratifying to know that they possess the ability to reach a higher plane of civilization and to make themselves worthy citizens of the Territory. The hope of the native races lies in the younger generation, who can get the most benefit from the schools. To this end it would be a decided advantage if the small and scattered villages could be concentrated into larger communities, where more elaborate and specialized methods could be pursued with the schools established therein, than in the present one-room schools. Progress along the line has already been made in several places where specified areas have been set aside for the exclusive use of the natives and the Bureau of Education. The latter's object has been to make these sections so attractive for the economic and social welfare of the adult that the natives will voluntarily move their families to them, with the immediate result of placing their children in a better-equipped and more efficient school. The present obstacle to this method lies in the antipathy of the natives toward anything that smacks of a restriction of their liberty.

Although these selected sections have actually been set aside by Executive order, the comparison with the Indian reservations of the States stops at that point. Natives living upon reservations in Alaska are in no way hampered in their coming and going and their status is in no way changed by residence thereon. In spite of the facts, however, statements have been circulated to the effect that these reservations were for the purpose of restricting the personal liberties of the native residents. In consequence, the natives are very reluctant to consider any proposals of this nature. The reservations already established have done much toward correcting this false impression. On several of them the inhabitants have successfully conducted private enterprises. Stock companies, representing native capital exclusively, have conducted stores and sawmills with unqualified success and have even handled a labor contract for a cannery, with satisfaction to both cannery and the employees. It is to be hoped that other native communities, where the conditions are favorable, will emulate the latter example especially.

The fishing industry is of vast value to Alaska, and the native people constitute a most important factor in that industry. The importation of laborers for the operation of the canneries has been a vexatious problem to the cannery men and a detriment to the Territory. At Metlakatla the "China" contract is being successfully handled by the natives for the second year. With a little supervision and proper organization there is no reason why this can not be done as well at other canneries to the mutual benefit of all concerned.

IMMEDIATE NEEDS OF THE NATIVES.

The necessity for enlarging the work among the natives of Alaska has annually been set forth in reports to this office. The immediate needs may be summarized as follows:

"An appropriation for education of not less than \$350,000 with which to meet the increased cost of operating the present school system and to pro-

vide school facilities for districts of Alaska which the bureau has been unable to enter for financial reasons.

"A power schooner for use in making delivery of supplies to the stations during the open season of navigation and to be used as a training ship in seamanship as part of the education of young natives in southern Alaska.

"Several trade schools in Alaska to enable promising young natives to complete their education under environments to which they are accustomed. Under present conditions, it is necessary for them to enter schools in the States, with the usual result of impaired health and making them unfit to return to their old environments.

"A reimbursable fund with which to establish industries in native communities. The success the bureau has already had along this line shows what might be done under proper supervision. The native people can and will repay any loans of this nature and industrial enterprises among them will not mean competition with the whites but rather the development of native resources."

ALASKA NATIVE MEDICAL SERVICE.

Not only must teachers in the native school service be able to teach adults and children sanitation, hygiene, and kindred subjects, but they must be able to give material aid when called upon. That the latter happens quite frequently can be readily understood in view of the fact that the teachers quite often are the only white people in the villages. To assist them in providing medical relief, each teacher is provided with a standard medical equipment with which to attend to ordinary ills and less serious injuries. By force of circumstances, however, when a doctor is frequently hundreds of miles distant, serious cases must be attended to to the best of knowledge and experience. While such a condition is very unsatisfactory, it can not be remedied without considerable outlay of money. The ideal arrangement, of course, would be to have a sufficient number of small hospitals, physicians, and nurses so that professional care for serious cases would be within reach of all the stations of the Bureau of Education. With an annual appropriation of but \$75,000, this can not be done. Under these financial limitations the bureau has been enabled to establish, operate, and maintain a complete hospital at Juneau, of 20-bed capacity, an 11-bed hospital at Kakanak, Bristol Bay, a similar sized one at Akiak, on the Kuskokwim, and small hospitals in charge of a physician and one nurse at Nulato, on the Yukon, and at Kotzebue. Contract physicians were also employed at Ellamar, Cordova, Hoonah, and Nome.

In addition to the nurses employed in the hospitals mentioned above, a nurse was stationed at each of the following places: Metlakatla, St. Michael, and Wales. Such a staff is absolutely inadequate to the requirements of the Territory, as was evidenced during the influenza epidemic which made such terrible inroads on the native population. The natives of Alaska are peculiarly susceptible to epidemics and not only from a humanitarian standpoint should they be protected, but in the economic interests of the Territory should the native races be safeguarded.

In September, 1918, the native hospital at Juneau was made uninhabitable by the Gold Creek flood, causing a damage of over \$7,000. The hospital continued operations during the year by renting the Juneau General Hospital building. The native hospital building is now being repaired and will again be occupied in the early fall.

During the present summer a hospital is being erected at Noorvik, on the Kobuk River. It will be practically a duplicate of the Akiak Hospital and will accommodate about 12 patients, besides providing quarters for the staff.

Through our agreement with the Presbyterian Mission Board, whereby the latter's hospital building and equipment at Haines, was turned over to the Bureau of Education and the board was given exclusive charge of the medical work at Hydaburg and Klawock, on the west coast of Prince of Wales Island, the Bureau of Education opened a tubercular sanitarium at Haines. As was expected, the first year of its existence was not particularly successful. Native people are very reluctant about leaving their homes when they are ill, and the experience of the Juneau Native Hospital's early days is being repeated. The natives must gradually become accustomed to and gain confidence in an institution such as the Haines sanitarium before much may be accomplished. A sanitarium is unquestionably the only method of combating tuberculosis

among the natives, and it is sincerely hoped that the institution will rapidly fulfill its object.

An excellent start has been made in the medical work among the natives of southeastern Alaska, which district, however, is but a very small part of the Territory. The Bureau of Education should have an appropriation of at least three times the present one in order to provide for the needs of the natives in other parts of Alaska. Unless their physical well-being is adequately attended to, the educational efforts for the natives are of doubtful permanent value.

ALASKA REINDEER SERVICE.

Until 1892 Alaska had no reindeer. In that year and for 10 succeeding years, 1,280 deer were imported from Siberia. To-day there are in the neighborhood of 125,000 reindeer in Alaska. The primary object of the introduction of reindeer was to make the natives of Alaska economically independent. By a system of apprenticeship a native serves for four years in learning to care for the deer and receives 6, 8, 10, and 10 deer for the first, second, third, and fourth years, respectively. At the end of his apprenticeship he is a full-fledged herder and assumes charge of his herd. After his herd attains sufficient size, he in turn is required to take on an apprentice. Thus the system of distribution among the natives is perpetuated, and any native desirous of owning deer can either acquire them in this manner or can purchase them from another native.

Under the reindeer rules and regulations of the Bureau of Education, native owners of deer are prohibited from disposing of female deer except to other natives. The industry is thus largely restricted to the native people. That the original object of bringing the deer to Alaska has been practically realized in all sections of the Territory where the deer have been introduced, is easily conceded. The deer furnishes the natives with food, clothing, transportation, and, where a local market is available, a considerable source of income through the sale of meat, hides, etc.

Although the deer are found in all of western Alaska from Point Barrow south to the Alaska Peninsula, there are other sections where the deer should be brought. The Bureau of Education plans to establish a herd in the Copper River district this winter, also one near Herendeen Bay, if the local conditions are favorable.

So complete has been the distribution among the natives that at the present time the Government holds title to less than 3 per cent of the deer in Alaska. Seventy per cent are owned by the natives, while 5 per cent are held by the missions in Alaska for the benefit of the natives. The remainder is owned by Laplanders and whites. The Lapps secured their deer without restriction as to their disposal for their services rendered in teaching natives the art of herding. From them were purchased most of the deer owned by the whites. The entry of the white men into this industry should mean much for its future. The Bureau of Education appropriation last year of \$6,000 was used entirely in the completion of the distribution of deer among the natives. Through lack of funds the bureau is consequently handicapped in working out problems in connection with marketing of the meat. The industry has now reached proportions where an outside market is imperative, and the present era of high meat prices makes this the opportune time. Some efforts along this line have been made by the white owners, and the present year should show considerable progress. Formerly attempts were made to market the meat in the States as a fancy article in order to obtain higher prices. This was necessary on account of the cost of placing the meat on the market in the States. Under present conditions, however, it is possible to make quantity deliveries in the States at low costs, thereby competing with beef, mutton, and pork. Thus the industry will be put on a firm and permanent basis and its future assured.

In addition to the marketing problems, there have also arisen certain questions dealing with the physical welfare of the deer which must be solved in the near future. Several kinds of diseases have developed. Warble flies infest many of the deer and make the skins practically worthless. The stock in many herds has deteriorated as a result of inbreeding. Several sections have become crowded and grazing regulations have become necessary to prevent clashes between owners of the herds.

To assist in these and other problems peculiar to the reindeer, the Bureau of Education has employed a veterinarian, with headquarters at Shaktoolik, in the Norton Sound country, who will give his entire attention to reindeer matters.

This is an immense step in the right direction, and it is hoped the bureau may be able to place similar specialists in other reindeer sections and that much good may result to this important industry.

MUSK OXEN.

The treeless coastal plains of northern Alaska, from the international boundary to Point Barrow and even as far south as the Seward Peninsula, were at one time the home of the musk ox. Vilhjalmur Stefansson, the Arctic explorer, states that he has found natives who remember the last hunt for musk oxen some time in the fifties. He has found remains scattered along the coast, notably on the Colville River. In one native hut near Point Barrow he found an old musk-ox hide. I once found a horn at Demarcation Point. The recent occupancy of these regions by musk oxen is established beyond question.

During the past year Jafet Lindeberg, of Nome, the largest white owner of reindeer in Alaska, suggested to me the possibility of re-establishing musk oxen in northern Alaska. I became greatly interested and immediately took up the matter with the chief of the United States Bureau of Biological Survey, finding a ready interest and desire to be of service.

It is now proposed, if the consent of the Canadian Government is secured, that Congress be interested in the scheme of importing a herd of musk oxen from Coronation Gulf or Melville Island for breeding them for the benefit of native or white settlers. An industry of the greatest future value to the United States is foreseen, and lands now wild wastes will become a national asset.

I am indebted to Mr. Stefansson for the information concerning musk oxen. Mr. Stefansson has observed them through a number of years of Arctic explorations and is in a position to speak more authoritatively than almost any other person. He suggests that a ship be sent to Melville Island during one summer, winter there, and return the following summer, landing the catch of musk oxen at any selected point along the Arctic coast.

Musk oxen undoubtedly can easily become domesticated and, being indigenous to the north, no experiments in the matter of food or range are necessary. As an article of food, the flesh closely resembles beef, large bulls weighing approximately from 600 to 700 pounds. The long, shaggy guard hairs of the coat cover a soft, long-fibered wool, which woolen-goods manufacturers have stated is equal, if not superior, to the finest domestic sheep wool, and of about twice the quantity found on the best sheep. Musk oxen have none of the roving instincts of cattle, their ordinary drift being not more than 5 miles per month, nor can they be easily stampeded by attacks of man or beast. When attacked the adult members of the herd quickly collect in a circle around the young and present a formidable front to the foe. Occasionally a bull will charge from the herd for a few yards and then retire quickly to his place in the phalanx. They are not aggressive except when directly attacked, but so sure is their defense that wolves, the principal enemy of game in the north, are ordinarily impotent against them. Milk is yielded in about half the quantity given by the average domestic cow, but it is richer and the taste is practically the same.

Here is an animal which seems by nature to be designed to make a productive country out of barrens now serving no purpose. In the musk ox are combined all the qualities most to be desired by a pioneer population of a desolate region. The northern portion of Alaska can never serve a better purpose than in becoming the grazing land of vast herds of reindeer and musk oxen, and when so utilized will in time become one of the great sources of meat supply for the United States. I advocate the reestablishment of musk oxen in Alaska.

RELIEF MEASURES.

Biennial appropriations are made by the legislature to cover the following relief measures:

Rescue and relief of lost persons	\$10,000
Pioneers' Home	107,200
Allowances for aged pioneers	40,600
Dependent children	12,000
Relief of destitution	15,000
Total	184,800

The above total does not include an appropriation of \$93,000 and the unexpended balances of other appropriations for relief authorized by the governor during the three epidemics of influenza, 90 per cent of which expense was incurred among the natives and should have been borne by the Federal Government.

Ten per cent of the Alaska fund is expended for the relief of destitution by the United States district judges of the four judicial divisions. This in 1918 amounted to \$21,962.10.

THE PIONEERS' HOME.

The Pioneers' Home at Sitka is the largest single institution in Alaska supported entirely by the Territory. Any worthy man incapable of supporting himself and who is qualified by five years of residence in Alaska may apply to the board of trustees for admission to the home. As far as is consistent with orderly government, the inmates are freed from restraint and carefully attended. The buildings of the home are the property of the Government and were formerly occupied by a detachment of marines stationed at Sitka. The houses are old and not particularly well suited for the purpose, but until the needed transfer of title to the Territory is made, the Territory does not feel warranted in making extensive repairs and betterments. An appropriation for a hospital, however, has been granted by the legislature and a certain amount of repairs will have to be made. On December 31 there were 62 inmates. Six were discharged, one was committed to the Morningside Sanitarium, and 19 died during the calendar year 1918.

The home is governed by a board consisting of the governor, as chairman, and two members. The same board also acts as a board for the granting of pensions to other aged pioneers, both men and women, who are capable of partial self-support. Monthly pensions are granted to indigent residents of Alaska who shall be not less than 65 years of age, if men, and 60 years of age, if women, and who have resided in the Territory for not less than 15 years; pen-

sions of not to exceed \$12.50 per month are allowed to men, and not to exceed \$25 per month to women.

Books, magazines, and amusements for the inmates are provided by the good people of Alaska. The employees of the Mother Lode Copper Co. were particularly generous.

GAME AND GAME LAWS.

Probably due to the great loss in population, game seems to be on the increase throughout the Territory. Due also probably to the same cause, another menace to game has arisen in the great increase in the number of wolves. Coyotes, too, have worked their way up from British Columbia and entered Alaska by way of the White River. They are reported by game wardens to have crossed over into the head of the Chitina River and to be spreading into the Copper River Valley, harrying sheep and caribou. This being the case, unless steps are taken toward their extermination, should coyotes spread into the reindeer ranges, conditions for this promising industry will become serious. The closed season on marten and beaver have driven many trappers from the field who annually killed many wolves, thus keeping down the packs. The Territory provides a bounty of \$15 on each wolf killed, but in itself this is not enough to be an inducement. A regulation of the Department of Commerce prevents the placing of poison, which in general is a wise provision, but authority should be given to certain designated vermin killers to place poison, and such killers should be employed. For the first time in at least 20 years, wolves in packs of over 100 are reported.

The controversy over what constitutes a brown bear within the law still goes merrily on. The law protects brown bear south of 62° north latitude. A \$5 shipping license is required for all brown bear hides, no matter where taken. This office rendered an opinion that a grizzly bear is not a brown bear and does not come under the license requirements. Merriam, who is undoubtedly the world's greatest authority on bear, differentiates between grizzlies and browns; so does Nelson. In talking to eastern sportsmen who assisted in drawing the Alaska game law, I find that the object of the law was to protect the great brown bear of the Alaska Peninsula and the near-by islands. In my opinion rendered, I was undoubtedly scientifically right, and yet I was promptly overruled by the Departments of Agriculture and of Commerce. I am advising that the matter be taken into court.

The great brown and grizzly bears of Alaska do yearly a great amount of damage, and I see no reason why they should be protected. The statement of sportsmen that bear do not attack people unless molested is capable of such overwhelming refutation that it amazes me that the statement should still be persisted in. I myself have seen a man who was attacked from behind while on the trail by a grizzly and the whole top of his head torn off. Men in my own engineering parties have been treed by grizzlies, and my pack train was at one time chased from camp by a great grizzly and not found for over a week. It seems that the brown and grizzly bears are being protected for the sole benefit of the nonresident sportsmen. They have no place in the economic development of the Territory any

more than the herds of wild buffalo would have in the wheat fields of Minnesota and the Dakotas. Many sportsmen bewail the passing of the migratory herds of buffalo, but this sentiment can not be found among the farmers of their ancient ranges. So antagonistic is the sentiment of Alaskans against the brown and the grizzly bear that no conviction can be obtained, nor will a conviction ever be obtained, for violation of the provision of the law protecting them.

There is the great cry among eastern sportsmen and conservation societies that the "meat trust" is endeavoring to commercialize Alaskan game, and that I, as the governor, am aiding the movement. This is too foolish to comment upon. The commercialization of the game as an industry would be most disastrous to the Territory. In remote regions game is an absolute necessity, and the inhabitants will take it in spite of any restrictive laws which may be passed or which are on the statute books. I want to see the game strictly protected, but this can not be done with an appropriation of \$20,000 a year to cover the salaries of the wardens and their travel expenses. To properly protect our game, we should have \$100,000 a year, with an additional initial appropriation of \$50,000 to cover purchase of launches, dog teams, etc. Should, however, Congress see fit to establish a constabulary, as advocated, the game wardens can be eliminated or incorporated in the force.

One great difficulty found in enforcing the game laws among Alaskans is on account of the reckless disregard in which the laws are held by some sportsmen holding nonresident hunting licenses. This has been frequently reported to me, and I have been at some pains to trace up the truth of the assertions. I have now in my possession photographs showing evident disregard of our laws and have come across hunters' camps where trophies brought in have been discarded so that only the picked heads, to the number allowed, would be exported. Two sportsmen I know of exhibit with pride trophies from game which, if the meat had been used, would dress, 7,000 pounds. Had this meat been utilized for human consumption by Alaskans, and had it become known to the ultra-conservationists, the uproar would have been heard from one end of the country to the other; but to these sportsmen it is perfectly legitimate, for had they not paid \$50 each for a hunting license, which goes into the general receipts of the Treasury and not into a fund for the protection of game?

I can quote many instances similar to the above.

Free permits issued to hunters for scientific purposes should either be abolished or more carefully inquired into before being issued. I find that this privilege is abused to a certain extent. I can not so state authoritatively, but I believe that a considerable percentage of the specimens taken under free permits find their way into private ownership. A holder of a free permit seems, as a rule, to consider that he is exempt from all restrictions. If a scientific organization really wishes specimens for its own use, it can get much better results by having them taken locally by men who know the country than by equipping an expensive party. During the fiscal year there were 18 free permits issued by the Department of Agriculture and 8 hunters' licenses issued by the governor's office. This hunting season there will be a great many more, but in approximately like proportion.

On the coast of southeastern Alaska, which is constantly served by steamers bringing fresh meat to the market, the deer should receive better protection. I advocate a license system for all hunters in this district. Except away from the ports of call, game is not a necessity to the inhabitants. Three successive hard winters, wolves, and the depredations of the summer fishing fleet have woefully depleted the deer. Southeastern Alaska alone needs more wardens than are provided for the whole Territory.

That excellent instrument, the migratory-bird treaty, should be modified to cover Alaska and the Yukon Territory. In recommending this I have the hearty approval of the commissioner of our neighboring Canadian territory. By the terms of the treaty no shooting is allowed before September 1. In all justice shooting in the North should commence August 15. By this time the birds are well grown and have commenced their southward flight. In the interior of Alaska and the Yukon Territory they have all left by October 1. On the coast all migratory birds have left by November 1. I trust this treaty may be amended.

It is inconsistent, to my mind, that two different departments of the Government should have jurisdiction over the wild animals of Alaska. It only leads to confusion, interlocking authority, and inefficiency. As matters now stand the Department of Agriculture has regulatory powers over the game animals and birds, including certain species of bear. Appropriations for law enforcement are estimated by the Department of the Interior and the governor appoints the game wardens. The Department of Commerce has power over the fur-bearing animals and other species of bear. Fur wardens are appointed by the department, with no centralized authority in Alaska. It is all so mixed up that were it not a serious matter it would be laughable.

There is absolutely no doubt in my mind but that the Territorial legislature is much better equipped to protect the game and fur-bearing animals than any scientific bureau or sportsmen's club located on the Atlantic seaboard. I had introduced into the legislature a measure carrying an appropriation for a game-licensing system, but it failed of passage, the attitude of the legislators being that the game and fur situation is so chaotic that any local attempt at betterment is predestined to failure. The legislature is willing to enact better laws, to be more strictly enforced, and only asks that all proceeds, now being covered into miscellaneous receipts of the Treasury, become part of the Territorial revenues.

In my report on Alaskan game conditions, to be made to the Secretary of Agriculture, I shall deal more fully with the subject of game and game laws.

BONE-DRY ALASKA.

During the fiscal year there were 91 arrests made by the special officers for the suppression of liquor traffic among the Indians for violations of the liquor laws—78 convictions and 13 acquittals. Fines amounting to \$8,410 were collected, and jail sentences aggregating 1,168 days were imposed. Other arrests were made by the marshals of the several judicial divisions and convictions obtained which are not included in the above.

Under an annual appropriation by the Government of \$15,000, there are four special officers for the suppression of the liquor traffic among the Indians employed—one in each of the judicial divisions. To properly enforce prohibition this appropriation is absolutely inadequate; the distances are too great, the expense of travel too heavy. Very little real whisky is now coming into the country, but the resourceful bootlegger is distilling his own "hootch" in neat stills which can be set up on a kitchen stove. Some of the stills captured are marvels of ingenuity. The product of these illicit stills (commonly known as "white mule," on account of its color and powerful "kick") is vile in the extreme and most injurious to health. Another source of drunkenness is found in sweet cider to which has been added raisins or other agents which cause fermentation. There is no prohibition of the import or sale of sweet cider, but cider in a very short time can be made into a powerful intoxicant. If prohibition is to be thoroughly enforced there must be more officers for its enforcement and a fund to be expended in detective work.

On the whole the Alaska "bone-dry" law has been very successful, and its beneficial results are seen everywhere, particularly in the homes. Families formerly living in practical destitution are now well cared for and happy. I should like to see the law rigidly enforced, with, perhaps, an amendment which will allow the use of grain alcohol for medicinal purposes. Doctors advise me that had alcohol been available during the epidemics of influenza a great many lives could have been saved.

AIDS TO NAVIGATION.

Owing to the great extent of the coast line of Alaska, with the many islands and indentations, navigation has at all times been difficult and dangerous. Scarcely a year goes by without record of a serious wreck. As fast as money has been made available new lights and other aids have been installed, each one of which marks some menace to the mariner. Gradually the Lighthouse Service is improving the safety of the coast, but the improvement is being too slowly effected, and the money appropriated is not commensurate with the trade demands of the Territory.

The newly established lighthouse and fog signal on Cape St. Elias has been a most wonderful help, but farther down the coast, at Cape Spencer, a bad situation exists. Cape Spencer marks the entrance of steamer travel to what is known as the Inside Passage, and it often happens that approaching vessels in time of fog or storm must lie outside the entrance in dangerous waters until visibility is restored. There are still needed approximately 200 aids to navigation to care for present traffic, but masters are almost unanimous in declaring that the proper marking of Cape Spencer is the crying need.

Due largely to insufficient aids and surveys, marine insurance becomes a very considerable factor in the determination of freight rates, already so heavy as to retard the growth of the Territory. I can not too strongly urge liberal appropriations, not only for new aids but also for new equipment, so that trade and travel may not

at all times be overshadowed by thoughts of disaster such as overtook the steamship *Princess Sophia*.

Nineteen new lights were established in Alaska by the Lighthouse Service since June 30, 1918. Four lights were changed from fixed to flashing, and 1 gas and bell buoy, 11 buoys of other types, and 3 beacons were established.

Before the present season is over several new lights will be established, as well as 1 gas and bell buoy, 2 gas buoys, and 25 unlighted daymarks. A considerable number of new aids to navigation will be installed before the close of the fiscal year ending June 30, 1920, and working scow and other equipment will be purchased during the year.

The total number of aids to navigation in Alaska, including lights, gas buoys, fog signals, buoys, and daymarks in commission at the close of the fiscal year ended June 30, 1919, was 459, including 178 lights and 8 gas buoys, representing an increase of 149 lighted aids since June 30, 1910, or over 400 per cent.

Progress has been made in the construction of a lighthouse depot for the Alaska service at the district headquarters, Ketchikan, under an appropriation of \$90,000, approved July 1, 1918. Completion of this depot is expected during the fiscal year 1920.

There is now pending before Congress an item of \$103,400 for establishing new aids to navigation and for improvements to existing aids in Alaska, including improving of Point Retreat and Cape Hinchinbrook light stations. Recommendations have also been submitted during the past year for light and fog-signal station at or near Cape Spencer, \$145,000; repairs and improvements to existing aids in Alaska, \$41,600.

COAST AND GEODETIC SURVEY.

The work of the Coast and Geodetic Survey is equally as important to the commercial development of Alaska as the establishment of aids to navigation, as industry, particularly in the fisheries, is reaching out into districts off from the regularly traveled routes. A very large percentage of steamer wrecks of late years is consequent to submarine dangers unknown. Pinnacle rocks abound in the canals, harbors, and inlets. It is most necessary that there shall be accurate charts.

The superintendent of the Coast and Geodetic Survey, in a publication entitled "Safeguard the Gateways of Alaska—Her Waterways," shows that while 64 per cent of the waters of the Philippines are charted, only 9 per cent of Alaskan waters have received equal attention, although title to Alaska was acquired in 1867 and to the Philippines in 1898. In parts of Alaska the charts of Cook, Vancouver, and the other early explorers must still serve the purpose for modern commerce. It is hoped that the survey will be enabled, by adequate appropriation, to place more and better ships into the surveying service. At present the steamer *Surveyor* is the only modern ship of the Coast and Geodetic Survey in Alaska, to which she has now returned, wearing a golden star on her funnel, after two years' naval service in foreign waters.

The superintendent of the Coast and Geodetic Survey makes the following report of the activities of the survey:

The accomplishments of the Coast and Geodetic Survey in making hydrographic and geodetic surveys in the Territory of Alaska during the year for which this report is made, have been materially lessened on account of the fact that considerable of the equipment and many of the officers of that bureau have been assigned to the Navy and the Army to meet the military needs of the Government. The outcome has been that no vessel surveys have been made in Alaska waters during the year nor were any geodetic surveys made.

The hydrographic surveys were confined to what was accomplished by two wire-drag parties. These two parties operated in the following localities:

Anchorage, Knik Arm.—The wire-drag survey which was in progress at the beginning of the fiscal year was completed July 28. On account of the rapid tidal currents in this locality, the use of the drag was possible only at slack water. So far as conditions permitted, the drag was set to within 3 to 5 feet of the bottom and to a depth of about 80 feet. No dangers of importance to shipping were found. An area of 1.3 square miles was covered in the vicinity of the wharves at Anchorage.

Port Chatham.—An investigation was made of the bight between Kelp and Clam Points where the dock of the Whitney & Lass Mining Co. is located. A beacon and range were established and 23 days later sufficient data were obtained to enable vessels to enter and leave in safety. The drag work was carried to the head of Port Chatham over all navigable areas and anchorage ground. The drag work was extended from outside Chatham Island through all waters of less than 20 fathoms across to Elizabeth Island and over the west entrance between this island and the mainland to the 20-fathom curve. A reported rock near the Anderson wharf, Seldovia, was correctly located. A least depth of 9 feet was found over it.

Wrangell Strait, from Petersburg to Frederick Sound.—A harbor sweep was used for making this examination. The sweep was extended to a maximum depth of 30 feet and as close to the bottom as practicable in less depths. The results obtained agree closely with the original survey.

Keet Inlet on the west coast on Prince of Wales Island.—Owing to the lateness of the season only preliminary work was accomplished in connection with making a wire-drag survey of this area. This consisted of establishing triangulation points and making a topographic survey. The topography and triangulation were extended to a junction with previously completed work in Cordova Bay.

Tidal observations were made for various periods of time at the following tidal stations: Ketchikan, Craig, Petersburg, Port Chatham, and Anchorage.

Agencies in Alaska for the sale to the public of the charts, tidal tables, the coast pilot, issued by the Coast and Geodetic Survey, were as follows:

Cordova—Northern Drug Co.
Haines—N. G. Hanson.
Juneau—The Old Post Office Store.
Ketchikan—Ryus Drug Co.
Kodiak—W. J. Erskine Co.

Petersburg—Petersburg Packing Co.
Seward—The Seward News Co.
Sitka—Chas. M. McGrath.
Valdez—Valdez Drug Co.
Wrangell—F. Matheson.

Magnetic observations: The magnetic observatory at Sitka has been in operation throughout the year, and a continuous record has been secured of the variations of the earth's magnetism. A number of earthquakes were recorded by the seismograph. During the summer of 1918 a magnetic observer secured a series of observations at places along the Yukon River, for the purpose of determining the magnetic elements since the observations of 1908 at the same places. He returned to the coast by way of Fairbanks and secured observations at a number of places en route.

While no vessel work has been done in Alaska waters during the fiscal year ended June 30, 1919, the prospects are bright for a rapid advancement of this class of surveys in the future. The *Surveyor*, a vessel constructed for the Coast and Geodetic Survey especially for work in Alaska waters, is in the vicinity of Shelikof Strait, and in the spring of 1920 it is anticipated that more survey vessels of the bureau will be in Alaskan waters than at any time since the purchase of Alaska from Russia.

MAIL SERVICE.

Great discontent over the mail service in Alaska is manifested on all sides, and it is the inadequacy of the service which is hurting Territorial development. Some of the complaints of last year have

been satisfied by amended regulations, but I suppose there is no place in the whole United States or her possessions where the mail requirements of the population have received so little consideration. Mail is still shipped to Alaska as express and freight, the mail clerks are still absent from the steamers, and business requiring action by return mail still languishes. Owing to the fact that freight mail pouches are no longer locked in a mail or express room, it is reported to me, on reliable authority, that robberies, particularly of parcels, are frequent. One trader at Kodiak lost over \$4,000 worth of fur in insured shipments, for which he could obtain no redress. Freight mail shipments are dumped in the vessel's hold and often covered with heavy pieces of other freight, so that it has become almost impossible to receive unbroken packages. West of Seward, conditions have been deplorable owing to the letting of contracts to boats incapable of performing service.

For over two months during a severe epidemic of influenza, Kodiak and Afognak Islands were cut off from communication, rendering it impossible to send medical relief. For the present year, the contractor has procured a larger boat, but mariners express grave doubts that she will be able to satisfactorily navigate the stormy winter seas. Proper shipping would soon build up industry on the western islands, but a seagoing ship, such as formerly ran from Seward, is, to a large degree, dependent upon the size of the contract offered.

Officials of the steamship companies and of the Post Office Department seem to have clashed hopelessly and all of Alaska is the sufferer. Points of call formerly visited, irregularly perhaps, but still visited, are now passed up unless freight or passenger revenue warrants a stop. Everyone is dissatisfied—the Post Office Department, the steamship companies, and particularly the long-suffering Alaskan. A special inspector of the Post Office Department has this year visited Alaska for the purpose of intensive inquiry. It is hoped that as a result some sort of order may be brought out of chaos.

WEATHER CONDITIONS.

The activities of the Weather Bureau have been further extended during the year by the establishment of additional cooperative weather stations in various parts of the Territory and the inauguration of a forecast service on a limited scale. Daily weather observations are now being made with standard equipment at 80 stations, the records constituting a valuable addition to the climatology of the Territory. The data from these stations are published in detail in monthly and annual reports that may be obtained from the Superintendent of Documents, Washington, D. C., at 5 cents each. Nine of the stations report by telegraph twice daily to the Juneau office, as well as to the bureau's forecasting centers in the States.

The fiscal year 1919 opened with a July that was characterized by an abundance of clear weather and bright sunshine, with attendant temperatures generally above the normal. Readings of 90° or above were recorded in the Matanuska, Tanana, and upper Yukon Valleys, while these districts had an average of 23 days during the month with temperatures of 70° or above. In the southeastern portion of the Territory there was an average of 15 days with 70° or above. While

the precipitation in the agricultural regions of the Yukon and Tanana Valleys was about normal in quantity, it practically all fell during the first four and last six days of the month. The soil became unusually dry during the latter part of the period, and forest fires prevailed in some localities. In the Eagle and Fortymile districts the rains were generally light, with a resultant restriction of mining operations from lack of water—a condition that continued to some extent during the remainder of the season, and that was also a factor in restricting operations in the Seward Peninsula, especially during August.

Seasonable temperatures prevailed generally during the late summer and early fall, except for a cool spell centering on August 26, and abnormally warm weather during most of September in the upper Yukon and Tanana Valleys. While these districts and the Copper River Valley experienced killing frosts on August 26, temperatures destructive to vegetation did not occur in the Matanuska Valley and Bering Sea region until September 11 to 13, and in southeastern Alaska until October 16.

A feature of the weather of September was the abnormally heavy rains that occurred over the northern end of the southeastern section and from thence westward along the Pacific coast to Kodiak Island. At Juneau the flooding of Gold Creek, due to a heavy downpour on the 25th and 26th, destroyed considerable property in the lower portion of the city. Much damage was also wrought to mining property and highways in the vicinity by earth slides occasioned by the heavy rains.

The first snowfall of the season was recorded in a few localities late in September, but the amounts were only a trace, except on mountain peaks.

The last three months of 1918 were noteworthy for the unseasonably cold weather that prevailed in the lower Yukon Valley and the Seward Peninsula, and that inflicted more than ordinary hardship and suffering upon the inhabitants of those districts owing to the prevalence of the influenza epidemic. The cold weather undoubtedly contributed largely to the high mortality among the natives.

The month of January was noteworthy for the unprecedented cold weather that prevailed in the western and southwestern portions of the Territory, all records for minimum temperatures being broken at a number of places. A temperature of -60° was recorded at Noatak and Candle, -58° at Holy Cross, -47° at Nome, -43° at Naknek, -26° at St. Paul Island, and -18° at Herendeen Bay. Considering normal conditions, the cold was most severe over the Pribilof and near-by Aleutian Islands, and in the vicinity of Dutch Harbor and Unalaska was attended by abnormally heavy snowfall—over 50 inches during the month. February was also below normal in temperature in this region, and there was a further fall of about 17 inches of snow during that month. The deep snow cover prevented the foraging of live stock as in previous winters, and is reported to have occasioned the loss of a number of sheep from exposure and starvation. In the southeast and in the Tanana and upper Yukon Valleys the first two months of 1919 were above the normal in temperature, but in March conditions were reversed, these sections being abnormally cold, while mild weather for the season obtained in western districts.

Although the snowfall was moderately heavy in December in the southeast, the Pacific coast region, and the Susitna Valley, and also in the last two districts in January, the fall for the winter in interior districts was unusually light. This was particularly true of February, March, and April. As an example, at Fairbanks, in the Tanana Valley, only a trace of snow or rain fell between January 28 and April 25. In the agricultural regions of the Matanuska Valley the snow disappeared from rolling fields during the last 10 days of March, in the Tanana Valley about April 10, in the middle Yukon Valley about the end of April, and in the lower Yukon Valley during the first week in May.

A result of the dry weather that obtained during the early spring was the occurrence of numerous forest fires in the upper Kuskokwim Valley and along the line of the Government railroad, both northeastward and southward of Nenana.

While freezing temperatures were recorded in the southeastern section as late as May 22, they were not damaging to vegetation, and the last killing frost occurred generally on May 3. In the agricultural valleys of the interior the last killing frosts occurred on various dates during May, depending on the locality and exposure. However, temperatures as low as 32° were recorded as late as June 21 at a few places, but with no material damage.

Although precipitation in the interior valleys during May and June was generally ample for mining and crop needs, the month of June was abnormally cool throughout the Territory, except the southwestern portion, and vegetation was thereby given a late start.

As usual, navigation on inland waterways ceased in October, the first streams to be closed by ice being the Noatak and Kobuk Rivers, both north of the Arctic Circle, the Noatak on October 1 and the Kobuk on the 3d. The upper reaches of the Koyukuk at Bettles and Allakaket closed next, on the 19th; the Tanana at Fairbanks on the 20th, and at Nenana on the 25th; the Yukon from the 22d at Fort Yukon to the 30th at Nulato. The Iditarod River closed on the 20th and the lower Kuskokwim at Akiak on the 22d. The roadstead at Nome closed on the 13th.

In the spring of 1919 the ice broke in the Tanana River at Nenana on May 3; in the Yukon from May 10 at Eagle to the 17th at Tanana and the 16th at Holy Cross. The Susitna River ice began running at Indian River on the 10th and at Talkeetna on the 13th. While the break-up in the roadstead at Nome occurred on May 26, it was not until June 14 that the first commercial steamer was able to make its way through the ice to that port.

On the following page will be found a table giving temperature and precipitation data for the year for representative stations in different sections of the Territory.

Temperature and precipitation data: July, 1918, to June, 1919.

Stations.	Section.	Mean temperatures.												Maxi- mum temper- ature.	Mini- mum temper- ature.	Precipi- tation (inches).
		July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.			
Ketchikan.....	Southeast.	60.0	57.4	55.8	46.2	39.3	33.6	35.4	32.8	33.4	42.2	45.6	51.4	85	4	155.94
Sitka.....	do.	56.2	53.2	51.6	45.6	40.1	34.2	35.2	34.7	33.7	42.2	45.4	50.2	78	16	98.16
Juneau.....	do.	59.7	54.4	52.2	42.4	37.5	31.6	32.0	30.1	28.2	42.4	49.2	53.5	83	7	99.61
Skagway.....	do.	60.2	56.2	51.7	41.0	34.2	27.7	27.6	25.6	24.8	43.2	47.0	54.4	86	1	28.05
Cordova.....	Pacific coast.	52.2	52.2	47.4	40.1	31.9	28.1	25.3	23.8	27.9	37.8	43.6	49.6	82	17	90.49
Seward.....	do.	59.2	53.8	44.8	42.0	26.4	22.2	16.4	18.0	20.1	35.2	44.2	52.1	82	-20	11.89
Anchorage.....	do.	57.2	54.1	50.5	35.6	15.6	12.8	7.1	21.3	23.0	37.8	47.0	53.6	82	-33	12.15
Matanuska.....	Matanuska Valley.	60.0	52.3	47.0	37.4	13.8	7.3	2.0	2.0	4.1	33.3	45.2	52.6	86	-47	12.55
Chitina.....	Copper River Valley.	60.0	52.3	47.0	37.4	13.8	7.3	2.0	2.0	4.1	33.3	45.2	52.6	91	-56	8.17
Fairbanks.....	Tanana Valley.	63.6	53.7	48.6	24.6	0.1	7.0	-10.8	1.4	2.4	30.1	42.8	51.2	92	-57	5.48
Eagle.....	Yukon Valley.	61.9	53.0	48.2	20.5	-11.0	-22.0	-26.0	-9.7	-6.3	24.2	42.4	53.0	92	-62	9.66
Fort Yukon.....	do.	62.6	56.0	44.9	16.8	-6.2	-12.6	-14.4	0.4	4.6	26.2	46.4	49.3	88	-66	12.03
Tanana.....	do.	61.0	52.2	45.6	21.1	-7.6	-9.0	-12.2	0.4	5.7	20.5	43.0	48.4	82	-57	12.03
Nulato.....	do.	59.0	50.4	41.8	21.1	-2.6	-4.2	-8.4	5.7	16.6	26.5	45.0	49.0	85	-58	8.17
Holy Cross.....	do.	59.8	53.0	44.2	29.3	-2.0	2.4	-6.8	14.4	20.2	26.5	45.0	49.0	85	-58	8.17
Adak.....	Kuskokwim Valley.	52.0	50.2	42.2	25.2	2.8	1.4	-5.3	9.2	15.8	16.2	36.3	40.2	74	-47	9.28
Nome.....	Seward Peninsula.	44.9	47.7	43.4	36.1	26.7	26.0	5.4	16.0	28.2	22.4	32.9	48.2	58	-26	24.15
St. Paul.....	Pribilof Islands.	55.5	51.6	47.8	32.8	11.2	13.8	4.0	22.8	25.1	32.3	41.5	48.2	79	-43	30.61
Naknek.....	Alaska Peninsula.	53.2	51.6	46.0	40.8	32.2	31.2	23.4	28.5	34.1	33.4	39.6	45.8	79	5	30.61
Dutch Harbor.....	Aleutian Islands.	70.6	70.9	55.1	50.9	37.8	39.6	22.2	16.4	45.0	54.0	58.2	70.2	94	-23	38.86
Minneapolis.....	Minnesota.	79.0	84.0	64.9	61.0	46.0	38.0	34.0	34.0	35.0	48.0	55.2	72.6	108	-13	32.06
Kansas City.....	Missouri.	71.2	75.7	58.6	57.4	43.5	37.7	31.0	30.5	38.5	48.0	55.2	72.6	102	-11	32.06
Chicago.....	Illinois.	75.4	77.6	65.1	60.6	47.6	40.9	37.7	37.6	45.4	52.4	64.0	72.0	106	13	37.51
Philadelphia.....	Pennsylvania.	72.7	74.8	62.8	58.6	46.7	39.0	35.2	34.7	42.0	48.8	61.0	69.7	102	9	35.50
New York.....	New York.	72.7	74.8	62.8	58.6	46.7	39.0	35.2	34.7	42.0	48.8	61.0	69.7	102	9	35.50

THE ALASKA FUND.

The revenues derived by the Federal Government from business and trade licenses outside of incorporated towns are collected by the clerks of the district courts, deposited to the credit of the Treasurer of the United States, and by him credited to the Alaska fund, under the act of Congress approved January 27, 1905. Sixty-five per cent of the money paid into this fund is appropriated for the construction and repair of roads and trails outside of incorporated towns and spent under the direction of the Board of Alaska Road Commissioners, 25 per cent for the maintenance of schools outside of incorporated towns, and 10 per cent for the relief of indigents, disbursed by the Federal judges, under the act of Congress approved March 3, 1913.

The sums collected during the fiscal year 1919, and a comparison with the previous fiscal year, are given in the following statement:

Division.	1918.	1919.	Increase.	Decrease.
First.....	\$127,905.11	\$112,809.97	.....	\$15,095.14
Second.....	8,597.68	8,495.62	.....	102.06
Third.....	137,047.40	148,988.86	\$11,941.46	.....
Fourth.....	19,611.45	10,612.35	.....	8,999.10
Total.....	293,161.65	280,906.80	.....	12,254.85

The net amount of cash for the first division, however, was only \$103,981.61, the difference, amounting to \$8,828.36, representing canceled fish-hatchery certificates, upon which rebates are made and credited to certain salmon canneries for the release of salmon fry in lieu of cash payment of taxes on their output and refund of excess payments. The net amount of cash from the third division was only \$146,534.86, the difference (\$2,454) representing fish-hatchery rebates as above.

The act approved June 26, 1906, provides that the catch and pack of salmon in Alaska by owners of private salmon hatcheries operated in Alaska shall be exempt from all license fees and taxation of every value at the rate of 10 cases of salmon to every thousand red or king salmon liberated, or a rebate of 40 cents is allowed on every thousand red or king salmon fry released.

The only increase in revenues for the fund is found in the third division, and is due to the increased fisheries output. The decreases in the other divisions are due to the curtailment of industries on account of loss of population and war conditions.

The total revenues received from taxes levied by the Federal Government within incorporated towns, from business and trade licenses, which were paid by the clerks of the district courts directly to the treasurers of the various towns, were as follows:

Division.	1918.	1919.	Increase.	Decrease.
First.....	\$59,538.45	\$40,426.51	.....	\$19,111.94
Second.....	8,346.12	5,029.00	.....	3,317.12
Third.....	11,017.86	19,986.13	\$8,978.27	.....
Fourth.....	2,198.85	2,777.67	578.82	.....
Total.....	81,101.28	68,229.31	.....	12,871.97

¹ Figures furnished in last year's report for 1918 were slightly in error and have been corrected, as above.

Besides the revenues derived by the Federal Government from business and trade licenses of all kinds in incorporated towns and outside of incorporated towns, taxes are levied on fisheries products, as follows: Canned salmon, 4 cents per case; pickled salmon, 10 cents per barrel; salt salmon in bulk, 5 cents per hundredweight; fish oil, 10 cents per barrel; fertilizer, 20 cents per ton.

The Alaska fund should now be covered into the treasury of the Territory for expenditure under the direction of the legislature, as since the passage of the act the Territory has provided complete school and road-building organizations and has created a board for the relief of indigents. The fund is now merely supplemental to Territorial appropriations, and further complicates the various operations. A law to this effect should be passed.

TERRITORIAL FINANCES.

The Territory has its own fiscal system, controlled by laws enacted by the Territorial legislature, which is entirely separate and apart from the revenues derived by the Federal Government from business and trade licenses and which are covered into and disbursed from the Alaska fund in the Federal Treasury. The Territorial revenue act, passed by the legislature, session of 1917, imposes the following license taxes:

Attorneys at law, doctors, and dentists, \$10 per annum; automobiles operating for hire, \$5 per annum; bakeries doing a business in excess of \$500 per annum, \$15 per annum; electric light and power plants, one-half of 1 per cent of the gross receipts in excess of \$2,500 and one-half of 1 per cent of the net profits from supplies sold; employment agencies operating for hire, \$500 per annum; salmon canneries, 4½ cents per case on kings, reds, or sockeyes, 2½ cents per case on medium reds, 2 cents per case on all others; salteries, 2½ cents per 100 pounds on all fish salted or mild cured, except herring; fish traps, fixed or floating, \$100 per annum, so-called dummy traps included; cold-storage plants, a graded tax from \$10 to \$500 per annum, according to the amount of annual business done; fish-oil works, using herring in whole or in part in the manufacture of fish oil, \$2 per barrel; fertilizer and fish-meal plants, using herring in whole or in part, \$2 per ton; laundries a graded tax, from \$25 to \$75 per annum, according to amount of business done; meat markets a graded tax, from \$25 to \$500 per annum according to amount of business done; mining, 1 per cent of the net income in excess of \$5,000; ships and shipping vessels registered in Alaska, not paying a tax or license elsewhere, doing business for hire or engaged in the freight and transportation business, \$1 per ton on the net tonnage, customs, house measurements; telephone companies, one-half of 1 per cent of gross receipts in excess of \$1,500; water works, one-half of 1 per cent of gross receipts in excess of \$2,500; public messengers, \$25 per annum.

The Territorial legislature, session of 1919, made some changes, principally in the fisheries schedules of the 1917 act. Becoming effective January 1, 1919, rates of taxation on canned salmon were raised 1 cent per case on all grades. In addition to the per-case tax, a tax of 1 per cent of net annual income was imposed upon salmon canneries. Tax of 2 cents per case was imposed upon canned clams and herring; the tax on mild-cured salmon was raised to 5 cents per

100 pounds on white and 10 cents per 100 pounds on red salmon. The tax on codfish was raised to 10 cents per 100 pounds, and a tax of \$1 per barrel was imposed upon the production of whale oil. A poll-tax law, levying a tax of \$5 on all men between the ages of 21 and 50, was passed for school purposes.

Taxes collected and other revenues accruing to the Territory are covered into and disbursed from the Territorial treasury, the fiscal year of the Territory corresponding to the calendar year. The condition of the Territorial treasury for the fiscal year ended December 31, 1918, was as follows: Balance on hand January 1, 1918, \$682,493.11; total receipts from all sources, \$475,450.55; total disbursements under appropriations made by the Territorial legislature, \$624,100.85; balance of cash on hand December 31, 1918, \$533,842.81.

TERRITORIAL BANKS.

At the close of the fiscal year covered by this report there were 15 Territorial banks and 3 national banks in the Territory, a loss of 1 during the year. No new banks were established during the year and there were no failures, the loss being occasioned by one of the Territorial banks at Nome voluntarily liquidating its affairs.

The Territorial banking board, composed of the governor, the secretary, and the treasurer of the Territory, continued its supervision over Territorial banking institutions. All such were examined during the year and made reports of conditions and published statements under call as required by law. Territorial banks are located at Ketchikan, Wrangell, Petersburg, Douglas, Juneau, Skagway, Cordova (2), Valdez, Seward, Anchorage (2), Fairbanks, Iditarod, and Nome. National banks are located at Juneau, Seward, and Fairbanks.

Outside of the sections benefited by the activity in the fisheries industries depressed business conditions continued to prevail during the year. The high prices of all commodities and labor, combined with scarcity of the latter, proved most discouraging to all commercial development in the Territory. Deposits in the several Territorial banks at call of April 30, 1919, aggregated \$6,047,543.74, as compared with \$5,974,728.82 under corresponding call of May 8 of the year previous. The gain shown, though small, is none the less gratifying, as under prevailing conditions a loss might well have been expected. Under the call of April 30, 1919, the combined capital of all Territorial banks aggregated \$745,000, as compared with aggregate of \$650,000 for the year previous. Aggregate surplus and undivided profits amounted to \$322,575, as compared with \$249,914.36 of the year previous.

CORPORATIONS.

On July 1, 1918, there were 258 domestic and 469 foreign corporations transacting business within the Territory, a total of 727. During the fiscal year 1919 there were 17 new corporations formed and 18 foreign corporations registered. There were 33 domestic and 31 foreign corporations dissolved, making a total number of 698 still transacting business, a net loss for the year of 29.

INCORPORATED TOWNS.

There are at present 17 incorporated towns in Alaska, listed as such with the secretary of the Territory, but the town organization of Chena has ceased to exist, practically all the inhabitants having moved away, and no action has been taken for the last three years to conduct a municipality.

Reports received from 14 of these towns show a total assessed valuation of \$14,195,025. The rates of taxation on the assessed valuations range from 1 to 2 per cent, the average being 1.5 per cent.

Assessed valuation and rate of taxation.

Town.	Assessed valuation.	Rate of taxation.
		<i>Per cent.</i>
Cordova.....	\$1,313,830	1
Douglas.....	429,032	1.5
Eagle.....	25,875	2
Fairbanks.....	2,815,577	1.75
Haines.....	198,000	1
Iditarod.....	(¹)	(¹)
Juneau.....	3,006,986	1.5
Ketchikan.....	1,000,000	2
Nome.....	1,263,988	2
Petersburg.....	384,205	1.25
Seward.....	1,681,906	1.6
Sitka.....	171,625	1
Skagway.....	603,191	1.5
Tanana.....	(¹)	(¹)
Valdez.....	555,064	2
Wrangell.....	245,847	2

¹ No valuation made and no tax levied.

SCHOOLS.

The public schools of Alaska are administered under both Federal and Territorial laws. The Federal law, known as the Nelson law, provides for schools outside of incorporated towns or incorporated school districts and receives for their maintenance 25 per cent of the Alaska fund. The Territorial laws provide for schools in incorporated towns or districts, one-fourth of the cost of maintenance being borne by the town or district by taxation of real and personal property and three-fourths by the Territory. Territorial laws provide for the establishment of night schools and carry an appropriation for the support of the same. Four communities took advantage of the provisions of the law during the year.

The people of Alaska are much interested in the cause of education generally and vitally concerned with the success and efficiency of the schools locally. As a whole, the schools are well organized with efficient and earnest instructors, in spite of the fact that Alaska, in common with the majority of the States, has suffered somewhat as a result of the scarcity of teachers. Seventy per cent of the teachers of Alaska are normal or college graduates. There are in all 35 teachers in the high schools of the Territory; 7 are normal graduates and 28 are college graduates, of which number 19 have in addition had advance study. The average teaching experience of Alaska teachers is seven and one-tenth years, exclusive of the school year for which the report is made.

The schools have been ardent supporters of all war activities during the year, as in the past. Junior Red Cross organizations, the purchase of war-savings stamps and Liberty bonds, the adoption of war orphans and the making of clothes for them, the organization of food-conservation clubs, the cultivation of war gardens, etc., have been the media through which children have given concrete expression to their loyalty to the National Government. Instruction in the real causes underlying the Great War, together with its important events, and in Americanism and patriotism have been prominent in the work of the year. Books, circulars, and pamphlets, secured from the various national patriotic organizations, were read and studied. Patriotic periods devoted to patriotic programs, addresses, "community" singing, and similar expressions of loyalty have been observed in all the schools. In many of the schools the boys and girls gave four-minute talks on patriotic subjects not only at their assemblies but also at the local theaters. Every effort has been made to create an understanding of the principles for which our country stands and of the duties and responsibilities of American citizenship.

SCHOOLS IN INCORPORATED TOWNS AND INCORPORATED DISTRICTS.

There are 13 schools in incorporated towns and 2 in incorporated school districts, supported in part by Territorial appropriation. The averages for the 15 schools, as shown by the table of statistics, is as follows: Average number of teachers, 5.8, with average yearly salary of \$1,279.93 per teacher; average enrollment, 130.33; average daily attendance, 100.31; average cost of maintenance, exclusive of teachers' salaries, \$3,970.53. The average cost per pupil was \$87.42, as compared with \$80.14 for the previous year.

Statistics of white schools for the school year 1918-19.

Location.	Number of teachers.	Total enrollment.	Average daily attendance.	Term (months).	Grade-school graduates.	High-school graduates.	Expenditures.		
							Salaries of teachers.	All other.	Total.
<i>In incorporated towns.</i>									
Cordova.....	5	109	72.72	9	7	.....	\$6,435.00	\$5,312.83	\$11,747.83
Douglas.....	9	151	122.80	9	6	5	9,029.00	3,092.88	12,121.88
Fairbanks.....	8	186	161.06	9	15	3	14,903.00	5,579.46	20,482.46
Haines.....	2	44	30.39	9	3	.....	2,070.00	664.31	2,734.31
Juneau.....	14	326	252.50	9	20	10	15,335.00	7,052.09	22,387.09
Ketchikan.....	11	289	221.45	9	22	5	13,575.00	5,900.00	19,475.00
Nome.....	6	105	76.45	9	6	.....	7,920.00	5,559.23	13,479.23
Petersburg.....	5	104	79.93	9	5	.....	5,731.69	3,073.04	8,804.73
Seward.....	4	96	67.33	9	3	.....	5,625.00	3,445.29	9,070.29
Skagway.....	5	103	82.41	10	9	.....	6,500.00	3,205.33	9,705.33
Tanana.....	1	23	17.93	9	.....	.....	1,350.00	857.30	1,707.30
Valdez.....	4	72	54.83	9	11	.....	5,040.00	1,872.84	6,912.84
Wrangell.....	4	110	81.95	9	4	.....	4,580.75	2,063.63	6,649.38
Total.....	77	1,718	1,321.00	.....	111	23	98,094.44	47,183.23	145,277.67
<i>In incorporated school districts.</i>									
Anchorage.....	8	193	149.76	9	15	4	11,110.00	8,424.20	19,734.20
Nenana.....	2	44	33.07	9	3	.....	3,150.00	3,501.21	7,051.21
Total.....	10	237	182.83	.....	18	4	14,260.00	12,525.41	26,785.41
Grand total.....	87	1,955	1,504.73	.....	129	27	112,354.44	50,708.64	172,063.08

Statistics of white and mixed schools outside of incorporated towns for the school year 1918-19.

District.	Number of teachers.	Total enrollment.	Cost of maintenance.	Term (months).
Afognak.....	3	88	\$5,115.93	9
Blackburn.....	1	16	2,414.70	9
Candle.....	1	14	2,672.65	9
Charcoal Point.....	1	24	1,635.32	9
Chatanika.....	1	20	2,017.58	9
Chitlagof.....	1	5	1,452.29	9
Chilkat Valley.....	1	11	3,464.00	9
Chitina.....	1	13	1,797.88	9
Council.....	1	14	2,303.02	9
Craig.....	1	37	1,648.89	9
Deering.....	1	13	2,288.63	9
Eagle River.....	1	4	816.18	5
Ellamar.....	1	12	1,601.73	9
Eska.....	1	20	1,780.05	9
Finger Lake.....	1	4	1,657.51	8
Fortuna Ledge.....	1	15	2,066.45	9
Fox.....	1	10	1,866.35	9
Girdwood.....	1	14	1,737.27	6
Haycock.....	1	18	4,453.54	9
Hope.....	1	11	1,527.51	9
Kasaan.....	1	29	1,452.67	9
Katalla.....	1	14	1,668.81	9
Kemal.....	3	60	5,354.54	9
Kiana.....	1	17	2,518.52	9
Kodiak.....	4	102	6,193.49	9
Latouche.....	2	40	4,223.63	9
Longwood.....	2	54	3,103.01	9
Loring.....	1	14	1,625.01	9
McCarthy.....	1	18	2,364.64	9
Ninilchic.....	1	27	1,715.21	9
Nushagak.....	1	21	822.75	5
Otter.....	1	15	2,368.45	9
Ounakie.....	1	21	1,226.17	6, 6
Perseverance.....	1	13	1,690.00	9
Ruby.....	1	20	2,309.75	9
St. Michael.....	1	22	2,096.64	9
Sanak.....	1	14	2,113.03	9
Scow Bay.....	1	20	1,559.35	9
Seldovia.....	1	54	1,970.83	9
Sitka.....	3	73	4,322.60	9
Sulzer.....	1	11	1,780.10	9
Teller.....	1	20	2,374.38	9
Tenakee.....	1	17	1,898.07	9
Thane.....	2	40	2,831.82	9
Tofty.....	1	9	575.00	3
Treadwell.....	2	53	3,269.17	9
Wasilla.....	1	13	1,802.19	8
Total.....	60	1,209	102,650.61	

SCHOOLS OUTSIDE OF INCORPORATED TOWNS.

For the year 1918-19 schools were maintained in 47 districts outside of incorporated towns and incorporated school districts. The 47 schools employed 60 teachers and had an enrollment of 1,209, as compared with 1,180 the previous year. The average number of pupils per school was 25.7, as compared with 25.6 the previous year. A total of \$109,650.61 was expended for maintenance, at an average cost of \$2,332.99 per school, as compared with \$2,174.93 for the previous year. The average cost per pupil was \$90.69, as compared with \$84.79 for the previous year.

PLACES OF BIRTH OF ALASKA SCHOOL CHILDREN.

Much misinformation as to the nationality of the Alaska school children still finds a place in the popular mind. A brief consideration of the following report, based upon the responses of 47 schools,

shows that in these 47 schools 58 States, Territories, and countries are represented. These statistics also evidence the fact that the Alaska population is to a great extent permanent, in that 1,255, or 56.9 per cent, of the 2,204 children enrolled in these schools were born in Alaska. It might further be added that Alaska is the native home of 34.8 per cent of the 221 high-school students included in the above enrollment.

Report of place of birth of Alaska school children.

Place of birth.	Number of pupils.	Place of birth.	Number of pupils.
Alaska.....	1,255	South Carolina.....	1
Alabama.....	1	South Dakota.....	4
Arkansas.....	1	Tennessee.....	1
California.....	58	Texas.....	2
Colorado.....	23	Utah.....	9
Connecticut.....	2	Virginia.....	1
District of Columbia.....	3	Washington.....	363
Idaho.....	12	Wisconsin.....	2
Illinois.....	12	West Virginia.....	2
Indiana.....	1	Wyoming.....	4
Iowa.....	5	Argentina.....	5
Kansas.....	7	Assyria.....	1
Kentucky.....	2	Australia.....	2
Louisiana.....	2	Canada.....	166
Maine.....	1	China.....	1
Massachusetts.....	9	Denmark.....	1
Michigan.....	17	England.....	6
Minnesota.....	26	Finland.....	13
Missouri.....	2	Greece.....	1
Montana.....	26	India.....	1
Nebraska.....	7	Japan.....	5
Nevada.....	4	Mexico.....	2
New Hampshire.....	1	Norway.....	23
North Dakota.....	16	Panama.....	3
Ohio.....	3	Philippines.....	3
Oklahoma.....	7	Russia.....	9
Oregon.....	92	Scotland.....	9
Pennsylvania.....	11	Serbia.....	2
Rhode Island.....	5	Sweden.....	6

Citizenship night schools.

School.	Enrollment—		Average attendance—		Sessions weekly.	Number of weeks.	Expenditure.
	Men.	Women.	Men.	Women.			
Anchorage.....	36	48	28	24	4	32	918.75
Fairbanks.....	19	1	8.5	1	4	15.5	466.55
Nenana.....	31	3	9	2	5	13	480.00
Nome.....	6	7	3	4	3	10	222.00
Total.....	92	59	48.5	31	16	73.5	2,087.30

Subjects offered.

Reading.	Arithmetic.	Civics.
Writing.	English.	
Spelling.	United States history.	

Nationalities represented.

American.	French-Canadian.	Montenegrin.
Austrian.	German.	Norwegian.
Belgian.	Greek.	Russian.
Canadian.	Hebrew.	Serbian.
Danish.	Irish.	Swedish.
Finnish.	Italian.	Swiss.
French.	Japanese.	

ALASKA AGRICULTURAL COLLEGE AND SCHOOL OF MINES.

Under chapter 62 of the Session Laws of Alaska, 1917, an appropriation of \$60,000 was made available for the construction of buildings for the Alaska Agricultural College and School of Mines on an appropriate site near Fairbanks set apart for the purpose by Congress. In 1918 the main building was erected and a well sunk. The board of regents then asked for an additional appropriation to enable the college to take advantage of the acts of Congress approved August 30, 1890, and March 4, 1915, whereby Federal cooperative assistance is given to such institutions of learning. The appropriation asked for was killed in the last hours of the legislature, and in consequence the building must lie idle until the legislature of 1921 can act.

ELECTIONS AND CONTESTS.

A general election for the purpose of electing a Delegate to Congress, members of the legislature, and road commissioners for the four judicial divisions of the Territory was held November 5, 1918.

As a result of the elections held in 1916, Hon. Charles A. Sulzer had been given the certificate of election as Delegate from Alaska to the House of Representatives of the United States, but was unseated in January, 1919, following a contest brought before the House by the Hon. James Wickersham, the former Delegate.

In the 1918 election, Mr. Sulzer and Mr. Wickersham were once more opponents. At a canvass of the votes made by the board authorized by law for that purpose, and consisting of the governor, the surveyor general, and the collector of customs, it was found that the greatest number of votes had been cast for Mr. Sulzer, and a certificate in his favor was issued accordingly. To the great distress of all who knew him, Mr. Sulzer died on April 15, while journeying from his home at Sulzer, Alaska, to the hospital at Ketchikan. Owing to a delay in the mails, the election returns from remote districts had not arrived at the office of the governor until the date of his death. On the 16th the few outstanding returns were canvassed and the certificate issued accordingly in favor of Mr. Sulzer.

To fill the vacancy, a special election was called by the governor for June 3. The only active candidates were the Hon. George B. Grigsby, the Territorial attorney general, Democrat, and Mr. J. L. Jones, the Independent Labor candidate. Mr. Grigsby was elected by a substantial majority.

Owing to the closeness of the November, 1918, election, in which Mr. Sulzer was awarded the certificate of election by the narrow margin of 33 votes, Mr. Wickersham has filed a contest for the Delegate's seat, alleging irregularities which, if eliminated, would have shown him to be elected. If Mr. Wickersham should win in this contest, the special election will not be effective.

TERRITORIAL LEGISLATURE.

The fourth legislative assembly convened at Juneau, the capital, on March 3 of this year and remained in session for the authorized 60 days. Sixty-two laws were enacted, as follows:

Chapter 1.—Extending the period covered by appropriations for the support of schools.

Chapter 2.—Making deficiency appropriation for allowances to aged residents of Alaska.

Chapter 3.—Appropriating money for the suppression of influenza.

Chapter 4.—Authorizing town councils to postpone city elections in case of epidemic.

Chapter 5.—Amending act requiring registration of vital statistics.

Chapter 6.—Defining criminal syndicalism and prescribing punishment therefor.

Chapter 7.—Amending act to prevent professional jurors.

Chapter 8.—Amending section 1105, Compiled Laws of Alaska, relating to exemptions from execution.

Chapter 9.—Establishing normal high schools.

Chapter 10.—Creating a textbook commission.

Chapter 11.—Roads and trails.

Chapter 12.—Amending compiled laws relative to support of widow and minor children and providing method of closing small estates.

Chapter 13.—Conditional sales.

Chapter 14.—Qualifications of voters in municipal and school elections in towns.

Chapter 15.—Carrying an appropriation to cover salaries of senators unavoidably absent.

Chapter 16.—Amending the banking law.

Chapter 17.—Amending the pension law.

Chapter 18.—Amending school law for schools outside of incorporated towns.

Chapter 19.—Appropriating funds for the Territorial council of defense.

Chapter 20.—Enjoining and abating houses of lewdness.

Chapter 21.—Relating to the filing for record of mortgages, etc.

Chapter 22.—Amending laws requiring foreign corporations to file annual reports.

Chapter 23.—Providing that Territory shall have preferred claim against the estates of inmates of the Pioneers' Home.

Chapter 24.—Providing for a special election to fill vacancy in the office of Delegate.

Chapter 25.—Providing for the establishment of citizenship night schools.

Chapter 26.—Providing for the election of divisional road commissioners.

Chapter 27.—Amending the uniform school law.

Chapter 28.—Amending school laws for schools in incorporated towns and districts.

Chapter 29.—Levying poll tax for school purposes.

Chapter 30.—Creating a fish commission and providing for the establishment of hatcheries.

Chapter 31.—Appropriating funds for a schoolhouse at Candle.

Chapter 32.—Authorizing the Territory to engage in maritime commerce and creating a shipping board.

Chapter 33.—Providing revenue.

Chapter 34.—Providing for the lease of school lands.

Chapter 35.—Health and sanitation.

Chapter 36.—General appropriations.

Chapter 37.—Prescribing the duties of the attorney general.

Chapter 38.—Amending chapter 30.

Chapter 39.—Primary elections.

Chapter 40.—Authorizing governor to make necessary certificates in connection with money granted to colleges of agriculture and mechanical arts.

Chapter 41.—Providing for the audit of vouchers for relief and rescue work.

Chapter 42.—Reimbursing Dr. Silverman for expenses incurred during measles epidemic at Kodiak, 1913.

Chapter 43.—Directing the attorney general to prepare an income-tax law.

Chapter 44.—Relating to the election of boards of trustees in railroad towns.

Chapter 45.—Amending an act to relieve destitution in Alaska.

Chapter 46.—Governing insurance companies and insurance agents.

Chapter 47.—Amending the act to regulate practice of pharmacy.

Chapter 48.—Authorizing formation of marine insurance companies.

Chapter 49.—Preventing family desertion.

Chapter 50.—Amending section 627, Compiled Laws of Alaska, relating to powers of common councils.

- Chapter 51.*—Empowering governor to grant pardons.
Chapter 52.—Requiring citizenship of notaries public.
Chapter 53.—Amending section 2045, Compiled Laws of Alaska.
Chapter 54.—Levying tax upon profits derived from sales of property.
Chapter 55.—Prohibiting the importation of diseased live stock.
Chapter 56.—Relating to the suppression of gambling.
Chapter 57.—Providing for the audit of vouchers for expenses incurred in sending relief expedition for the schooner *White Bear*.
Chapter 58.—Providing for the protection of salmon spawning grounds.
Chapter 59.—Creating the office of labor commissioner.
Chapter 60.—Levying inheritance tax.
Chapter 61.—Power of sale by trustee in deeds of trust.
Chapter 62.—Providing that postmasters shall act as notaries in execution of affidavits re mining claims.

Under the act approved August 24, 1912, "An act to create a legislative assembly in the Territory of Alaska," etc., the legislature was given a limited authority in the enactment of laws. The legislature has now passed the experimental stage and it is my opinion that it can safely be intrusted with the more complex problems of government such as have been delegated to other Territories. Congress should give this subject earnest consideration, as it seems impossible for them to devote the necessary time to Territorial affairs, particularly when the more important national matters are engrossing the attention of the Federal body.

One bill was vetoed by the governor and two failed of approval after the legislature had adjourned.

LABOR CONDITIONS.

There has been a general shortage of labor throughout Alaska. Mines of all kinds have been working short-handed, resulting in a curtailment of output. The gold mines have been the greatest sufferers, as the operators have not been able to compete for labor as have the copper mines when that metal was in demand.

Wages in all classes of mines compare favorably with wages paid in the States, but with a nation-wide demand, laboring men prefer to work in larger communities, although the opportunities for saving are better in Alaska than almost anywhere else; rents are lower, and there are not the temptations to spend.

The resident workingman is of the very highest type—capable, energetic, and thrifty—but unfortunately Alaska during the past year has received many immigrants of the most undesirable type. The I. W. W. and advocates of soviet rule have been most active in agitating disturbance. The lack of police protection is well known, and the radicals work openly in their efforts to disorganize industry. Unfortunately, there are very large numbers of ignorant, illiterate laborers of foreign extraction in the Territory, and in many places the seeds of sedition, skillfully sown, have fallen on this fertile soil. Except for the mounting cost of living, there seems to be little dissatisfaction among the wage earners, practically all agitation emanating from that class who are denunciatory of all vested interests but whose hands show no signs of callus.

In the fisheries there are many aliens and declarants who have given up their papers of intention to evade the draft. There is no way in

which these aliens and slackers can be apprehended except through the limited patrol of the Bureau of Fisheries.

A system of employment prevailing among many of the canneries, under what is known as a "China" contract, should be abolished. A contract is entered into with a Chinaman under which a number of persons are employed by him, shipped to Alaska to work during the canning season, and then returned to Puget Sound, Portland, or San Francisco, where they are paid off through the same agency. This system is applied not only to orientals but frequently to white labor as well. It is right neither in principle nor practice, and has been the cause of much dissatisfaction.

During the past session of the legislature several eight-hour bills were introduced, but failed of passage. In attempting to give the bills as general a character as possible, it would seem that too many toes were trodden on. For the mining industry it was claimed that it was impracticable to operate on an eight-hour shift with the present purchasing power of gold, while it was said that an eight-hour day for the transportation systems in the interior of Alaska would result in an increase of freight rates by some \$10 per ton; the fish packers (the ones really aimed at) maintained that an eight-hour day was impracticable because, as they alleged, when a run of fish is on plants must operate more hours to prevent the spoiling of the raw material; the fishermen themselves asserting their absolute inability to comply with an eight-hour law, for the reason that almost all of them are share workers. Many industries, however, have voluntarily assumed the eight-hour day with successful results, and no complaint is heard from the lode mines, in which an eight-hour day is compulsory.

I believe that splendid opportunities exist in Alaska for the laboring man. The married man will find good schools in almost every community and comfortable homes are to be had at a modest rental. At present there is no need of any man in Alaska to be out of work.

TERRITORIAL BUREAU OF PUBLICITY.

Within the past year the operations of the Territorial bureau of publicity have been materially broadened in several respects, one of the principal features of the bureau now being the publication of the Monthly Bulletin, which aims to give a condensed account of industries under way or in contemplation throughout the Territory, report new discoveries of minerals, and to give publicity to the advantages, resources, needs, and requirements of each and every section of Alaska. Six thousand copies of the Bulletin are distributed each month among the departments at Washington, Members of Congress, all the principal commercial organizations throughout the United States, and the leading newspapers and periodicals. Of the approximately 4,500 copies of the Bulletin distributed monthly among the newspapers of the country, excellent results are being obtained through the advertising generously given to Alaska, as shown in the increased number of letters of inquiry concerning the northland which are received in every mail by the bureau, the correspondence of which has more than doubled within the past year.

In addition to the Monthly Bulletin over 75,000 pieces of literature advertising Alaska, her resources and possibilities, have been dis-

tributed within the past year. As a result of this advertising a few homesteaders have already arrived and secured locations; fully 1,000 persons are in correspondence with the bureau of publicity, with the view of securing homes in Alaska, and as many more are what might be termed "interested."

The central labor bureau which is maintained in connection with the bureau of publicity has done much during the past year in distributing labor, securing positions for many already in the Territory, as well as being the means of bringing hundreds of laboring men and women from elsewhere and securing for them steady and profitable employment.

The office of the bureau is maintained at Juneau and has recently moved to more commodious quarters in the Arctic Brotherhood Building, where the Territorial experimental fish hatchery is located. An exhibit of historical interest is being arranged as well as exhibits of natural resources.

The bureau will gladly furnish information on all subjects at any time.

SELECTIVE SERVICE.

The operation of the selective-service system in Alaska was carried out with little confusion under the direction of the governor, assisted by an executive officer commissioned by the Secretary of War. There were 21 local boards scattered throughout the Territory and four district boards, one for each of the four judicial divisions.

Twenty-two hundred and twenty-three registrants of the class of June, 1917, were inducted and sent to camp, 1,656 of whom were delivered to Alaska posts. It is estimated that fully 1,500 young men left Alaska and enlisted in the States, either in the Army or Navy, and are credited to the States wherein enlistment took place. Many Alaskans are not credited to Alaska in the draft, as a large number of registrants, although they had been in the Territory for years, gave their home address as some place in the States, usually where their parents resided. In consequence, these registrants, when inducted, were credited elsewhere.

While the proportionate number of delinquents and deserters appears to be large, that condition is due mainly to the reasons set forth in a previous report, namely, the great number of illiterates and non-English-speaking aliens in Alaska, the vast extent of the Territory, and the infrequent mail service to remote places.

The total cost of the draft in Alaska approximates \$32,000.

In last year's report it was stated that 10 per cent of our registrants were physically rejected by the local boards, in comparison with the general average of 30 per cent in the States. Subsequent figures are incomplete, but do not serve to vary the figure. Of the 1,656 registrants sent to posts in Alaska, 46 were rejected, an average of 2.7 per cent. The commanding officer of one company told me that his particular company averaged 3 inches taller and 7 pounds heavier than any other company in the United States Army.

One seeming injustice was worked on many registrants called from remote districts, in that they were obliged to travel to the

nearest local board at their own expense, involving in some instances the expenditure of several hundred dollars and weeks of time. An attempt was made to procure reimbursement from the Provost Marshal General, but no funds were available to cover this unusual condition.

I can not close this chapter without expressing grateful acknowledgment to the members of the local, district, and advisory boards for the intelligent and loyal efforts of all connected with the service. The greater number of all board members devoted their time to the Government without recompense, often to the neglect of their own business.

Little can be added to the information contained in the tables following:

TABLE No. 1.—*Final status of registrants.*

Classification.	Class of June, 1917.		Class of June, 1918.	
	White.	Colored.	White.	Colored.
<i>Class I.</i>				
General service men available for future calls finally classified and physically qualified.....			181	13
Limited service men available for future calls.....	62			
Remediable groups.....	29	2		
Emergency Fleet.....	135			
Delinquents (not deserters).....	259	1		
Deserters (not accepted at camp).....	471	7		
<i>Physical examination pending.</i>				
Before local board.....	23			
Before medical advisory board.....	1			
Inducted and sent to camp (including accepted deserters).....	2, 214	9		
Called for induction on all pending calls.....	264	1		
Total Class I.....	3, 458	20	181	13

	Class of June, 1917.	Class of June, 1918.
Class I (total white and colored).....	3, 478	194
Class II.....	141	
Class III.....	86	
Class IV.....	728	
Class V.....	2, 223	
Total cases finally classified.....	6, 656	194
Total registrants (excluding cancellations).....	6, 656	194

Classification suspended.	Class of September, 1918 (white and colored).		
	19 to 36 years, inclusive.	37 to 45 years, inclusive.	18 years.
Total registrants (excluding cancellations).....	4, 435	5, 561	157

TABLE NO. II.—*Number of selective service registrants under the jurisdiction of local boards in Alaska.*

Local board.	Class of June 5, 1917, registered July 2- Sept. 2.	Class of June 5, 1918, registered July 2- Sept. 3.	Class of Sept. 12, 1918, registered Oct. 15- Dec. 16.
1. Douglas.....	190	2	237
2. Haines.....	30	2	41
3. Juneau.....	801	32	1,114
4. Ketchikan.....	798	43	1,070
5. Petersburg.....	135	4	282
6. Sitka.....	157	10	447
7. Skagway.....	94	0	109
8. Wrangell.....	111	5	213
9. Nome.....	251	6	631
10. Anchorage.....	1,744	14	1,170
11. Cordova.....	412	12	633
12. McCarthy.....	256	5	428
13. Seward.....	477	17	942
14. Valdez.....	301	17	387
16. Eagle.....	24	1	174
17. Fairbanks.....	447	4	860
18. Iditarod.....	123	7	423
19. Nenana.....	210	6	478
20. Ruby.....	69	3	129
21. Tanana.....	36	4	145
22. St. Michael.....			182
Total.....	6,656	194	10,153

TABLE NO. III.—*Third registration.*

Local board.	Citizenship.					Race.					Total.
	Native born.	Natural- ized.	By father's naturaliza- tion.	De- clar- ants.	Non- de- clar- ants.	Whites.	Ne- groes.	Orien- tals.	Indian citi- zens.	Indian non- citi- zens.	
Douglas.....	53	38	6	39	98	208		4	9	16	237
Haines.....	23	5	1	7	5	31		1	6	3	41
Juneau.....	511	119	35	231	218	967	10	50	87		1,114
Ketchikan.....	549	126	15	190	181	785		72	213		1,070
Petersburg.....	77	60	5	95	45	267	1	13	1		282
Sitka.....	245	26	6	66	94	286		10	95	56	447
Skagway.....	70	7	6	12	14	100	1	3	5		109
Wrangell.....	112	20	5	49	27	211		2			213
Nome.....	335	137	16	73	70	431	1	4	165	30	631
Anchorage.....	483	120	30	207	330	1,158	2	10			1,170
Cordova.....	253	61	29	112	178	583	3	36	6	5	633
McCarthy.....	114	52	7	93	162	407		21			428
Seward.....	482	103	13	152	192	645	3	15	218	61	942
Valdez.....	135	54	3	101	131	387		23	8	6	424
Eagle.....	104	13	8	30	19	171	1		1	1	174
Fairbanks.....	315	149	28	228	149	860	1	2	3	3	869
Iditarod.....	147	44	18	74	140	415				8	423
Nenana.....	168	53	21	129	119	478	2	6	4		490
Ruby.....	57	23	6	31	12	126	1	1	1		129
Tanana.....	79	17	5	30	14	127	1		16	1	145
St. Michael.....	119	19	2	24	18	130			51	1	182
Total.....	4,434	1,256	265	1,982	2,216	8,773	27	273	889	191	10,152
Percentage.....	44	12	2.6	19.5	21.9	86.4	0.3	2.7	8.7	1.9	100

TABLE No. IV.—*Alien registrants.*

Native country.	Number of declarants.	Number of non-declarants.
Belgium.....	23	10
England.....	81	90
Scotland.....	32	25
Wales.....	10	
Canada.....	120	190
Australia.....	7	4
New Zealand.....	4	2
Newfoundland.....	5	7
Jamaica.....	1	
Other British possessions.....	6	5
France.....	8	5
Italy.....	58	84
Portugal.....	1	5
Russia.....	174	262
Servia.....	11	25
China.....		6
Japan.....	2	177
Denmark.....	51	18
Netherlands.....	5	6
Norway.....	458	185
Roumania.....	4	2
Spain.....	4	2
Sweden.....	278	202
Switzerland.....	25	10
Mexico.....	5	35
Central and South America.....	4	6
Sundry.....	113	339
Austria-Hungary.....	145	220
Bulgaria.....	15	22
Turkey.....	6	11
Germany.....	105	45
Grand total.....	1,810	2,042

TABLE No. V.—*Alien registrants who surrendered their declaration of intention under the jurisdiction of local boards of Alaska.*

Local board.	Swedes.	Norwegians.	Mexicans.	Hollanders.	Total.
1. Douglas.....					
2. Haines.....					
3. Juneau.....	3	3			6
4. Ketchikan.....	1	13	1		15
5. Petersburg.....		19			19
6. Sitka.....		4			4
7. Skagway.....					
8. Wrangell.....	1	8			4
9. Nome.....	1	2			3
10. Anchorage.....	20	2		1	23
11. Cordova.....	1	4			5
12. McCarthy.....	3	2			5
13. Seward.....	2				2
14. Valdez.....	3	1			4
15. Eagle.....		1			1
17. Fairbanks.....	1				1
18. Iditarod.....					
19. Nenana ¹					
20. Ruby.....		1			1
21. Tanana ¹					
22. St. Michael ¹					
Total.....	36	55	1	1	93

¹ Not reported.

FOOD ADMINISTRATION.

The office of the Federal food administrator for Alaska closed February 15, 1919. Closely following the end of the 1919 fishing season came the signing of the armistice, with the result that the volume of work passing through the food administrator's office declined rapidly. The first food administration's regulations rescinded after the armistice was signed were those effecting the individual; the next affected the retail dealer; the next, the wholesaler, and the next the manufacturer. Inasmuch as there are no manufacturers and no wholesalers, and but few retailers whose business was subjected to control by the Food Administration, Alaska was relieved from all food restrictions sooner than any other part of the country.

The remarkable success of the Federal Food Administration in Alaska was due in a large measure to the patriotic and voluntary support of all food dealers, consumers, proprietors of hotels and restaurants, and others handling and dealing in food commodities. All requests made were cheerfully and fully complied with.

The women of the Territory deserve much credit not only for the way in which they observed all requests for the conservation of food but also for their active work in the campaign of education that was necessary for the saving of essential foods.

Great credit is due the divisional, district, and local Federal food administrators for the splendid work they voluntarily performed in carrying out the food program during the war.

TOURIST TRAVEL.

More tourists have visited Alaska this season than ever before. This is due largely to the closing of trans-Atlantic travel to pleasure seekers and to the well-placed advertising by the bureau of publicity. In fact, travel has been so heavy that returning residents of the Territory have often been obliged to wait for weeks before being able to procure accommodations. The class of tourists has been remarkable. We have had noted publicists, authors, jurists, musicians, educators, naturalists, and men of world affairs. All have expressed themselves as being astounded at the marvels of scenery, our industries, latent possibilities, and the intelligence and refinement of the population. Some have made investments. All have become ardent supporters of the country.

Tourist travel properly directed will advertise Alaska as can be done in no other way. There is no reason why steamers, specially equipped for tourist service and making cruises to the various points of interest, should not be successfully operated during the months of June, July, and August as well as during a part of September. Prices could be charged to cover all special demands of comfort and luxury. It is my understanding that one foreign line is already arranging for such service. Tourists desiring to extend their trips into the interior can make connections with the Yukon and Tanana River steamers or the Government railroad and receive impressions entirely different from those obtained while merely following the coast line. The Alaska Bureau of Publicity at Juneau will be glad to furnish all information desired.

PUBLIC BUILDINGS.

The need for a public building at the capital is yearly becoming more apparent. The Federal offices are scattered in various parts of Juneau in wooden structures, which may at any moment be destroyed by fire. The records of these offices are unprotected, and if lost could not be replaced. The office of the governor is housed in a shack, constructed many years ago as an Indian school. The building is unsafe in its present condition, but must continue to be occupied, as suitable quarters can not be procured for the amount appropriated by Congress for rental of offices. There is, of course, as in the other offices, the ever-present danger of fire, which, should it break out, will undoubtedly destroy all the valuable archives and books and collection of the historical library and museum. Some of the books are priceless.

An appropriation exists of approximately \$175,000, which could be used in constructing a portion of a building to be completed at a future date, if Congress considers that a larger expenditure at present is ill-advised. To construct such a portion of a building, the permission of Congress must first be procured.

The appropriation for the current fiscal year carries an item of \$2,000 for finishing the executive mansion. Prices, however, have risen to such an extent that the amount estimated will not entirely cover the work to be done. In consequence, it is planned to finish only the halls, one bathroom, and two bedrooms, which will answer for the time being. Until an appropriation was made by the Territorial legislature to inclose the grounds of the mansion, the grounds surrounding it were a disgrace to the Government. The grounds have now been terraced, sodded, and inclosed, but there should be a small yearly appropriation for their care, so that visitors to the capital may not be impressed with the atmosphere of universal governmental neglect, now only too apparent.

OFFICE OF THE GOVERNOR.

The office of the governor does not receive the support to which it is entitled. In the face of daily increasing costs, the appropriation for salaries of clerks, travel expenses, maintenance of the office and the executive mansion, and other contingent expenses, for the past two fiscal years has been cut from the prewar allowance of \$7,500 per annum to \$6,000. On December 31, 1918, the entire amount available for contingent expenses had been expended, and had there not been a small Territorial fund, known as the emergency fund, available, the use of which for the purpose was doubtful, I should have been obliged to cease my duties as a Federal official.

The importance of the office is growing every year, and the expense must be met from some source. Territorial assistance has been rendered under the excuse that the governor is the executive head of Territorial laws. A large part of the maintenance expenses properly belonging to the Federal Government have been borne by me personally. Necessary official and private entertainment bears heavily on whoever may be the governor. He is established in a large, handsome house, suitable to a man of unlimited means, the bare maintenance of which consumes the entire salary provided. In fact, the

expense of holding the position in only the most modest manner is nearly twice the amount of pay. The salary of the secretary to the governor is absolutely inadequate, particularly for a man of family. The secretary must be not only a good executive, but a man of tact and of good appearance. Aside from a secretary, no other clerical assistance is provided the governor by the Government, but such allowances have been made by the legislature as will allow the office to be conducted in a fairly effective manner.

As an example of the amount of business transacted, during the month of June there were 672 letters and 139 telegrams sent from the office. The average office day is nine hours, with few leaves of absence, and then only for short periods.

The governor must and should travel to a great extent. For his expenses he is allowed a per diem of \$4 in lieu of subsistence, or actual subsistence not to exceed \$5 per diem, which any traveler nowadays knows will not cover the barest necessities, particularly if travel is performed within the Territory. It would seem that in the matter of travel allowance the governor should at least be entitled to the same consideration shown district judges, certain members of the General Land Office, and other Federal employees. It is not right that officials should be expected to personally defray expenses brought about in the performance of their duties.

TABLE OF RECOMMENDATIONS.

In conclusion there is submitted a list of the principal recommendations detailed in the body of the report. I trust that some may receive favorable consideration:

Reimbursement of the Territory for money spent for the relief of natives.

Consolidation of all governmental authority possible in the Department of the Interior, thus doing away with conflicting departmental jurisdiction.

Removal of restrictions on export of birch timber from public lands.

Establishment of a uniformed constabulary.

Assignment of naval or coast-guard ships to continuous duty in Alaskan waters.

Reimbursement of chrome producers for losses incurred while operating under encouragement from the Government.

Restoration of the prewar appropriation of \$100,000 to the division of mineral resources of Alaska of the United States Geological Survey.

Transfer of jurisdiction over fisheries to the Territory.

Exemption of Alaskan canneries from the provisional regulations covering the administration of Title XII of the revenue act of 1918 levying a tax on the employment of child labor.

Assistance to farmers by loan of money and cattle.

Consolidation of authority in local land offices and creation of office of secretary of the Territory.

Restoration of national forests to the public domain.

Appropriation for Mount McKinley National Park.

Increase of contract price for the care of the Alaska insane.

Increased telegraph service.

Increased appropriations for roads and trails.

Increased appropriation to the Bureau of Education for work among the natives.

Appropriations for the reestablishment of musk oxen in northern Alaska.

Increased appropriations for the protection of game and the suppression of the liquor traffic.

Increased appropriation for the establishment of aids to navigation.

Increased appropriations for coast surveys.

Renewal of mail contract system for the delivery of mail.

Passage of an act covering the revenues now accruing to the Alaska fund into the Territorial treasury.

Amendment of organic act to grant full Territorial powers of legislation to Alaska.

Authorization for the construction of a public building at the capital.

Increased support to the office of the governor.

APPENDIXES.

APPENDIX A.

STATEMENT OF LIBRARY AND MUSEUM FUND.

Receipts and disbursements of the Alaska Historical Library and Museum Fund from July 1, 1918, to June 30, 1919.

RECEIPTS.

Date.	Received from—	Title or business.	Amount.
1918.			
July 1	Balance on hand.....		\$12,353.15
3	Alfred S. Kepner.....	Notary public.	10.00
5	H. F. Dett.....	do.....	10.00
6	L. W. Kilburn.....	do.....	10.00
11	R. W. Taylor.....	do.....	10.00
15	Arthur Lang.....	Member of bar	10.00
16	Morton E. Stevens.....	Notary public.	10.00
17	Gus Gelles.....	do.....	10.00
18	Karl Armstrong.....	do.....	10.00
22	Z. B. Chaney.....	do.....	10.00
24	Henry Roden.....	do.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of July, 1918.		20.00
Aug. 5	R. M. Odell.....	Notary public.	10.00
12	Carl Almy.....	do.....	10.00
12	Geo. Dooley.....	do.....	10.00
17	C. E. Danforth.....	do.....	10.00
17	Geo. Irving.....	do.....	10.00
22	T. J. Dodds.....	do.....	10.00
22	Geo. D. Schofield.....	do.....	10.00
22	E. H. Mack.....	do.....	10.00
28	H. I. Lucas.....	do.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of August, 1918.		8.00
Sept. 1	Jas. M. Streeban.....	Notary public.	10.00
6	W. E. Ross.....	do.....	10.00
9	S. O. Morford.....	do.....	10.00
11	Euth Selby.....	do.....	10.00
16	Lloyd Lewis.....	do.....	10.00
30	J. Fillmore Warder.....	do.....	10.00
30	Chas. H. Miller.....	Member of bar	10.00
30	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of September, 1918.		9.00
Oct. 3	Geo. W. Albrecht.....	Notary public.	10.00
3	D. E. Stubbs.....	do.....	10.00
8	Fred Wilkins.....	do.....	10.00
8	John Rustgard.....	do.....	10.00
8	Frank S. Barnes.....	do.....	10.00
8	Chas. E. Ingersoll.....	do.....	10.00
8	Whitney W. Clarke.....	do.....	10.00
8	I. W. Southward.....	do.....	10.00
8	Harry Colter.....	do.....	10.00
17	John H. Kelly.....	do.....	10.00
19	Jane Louise McNally.....	do.....	10.00
21	Helen Grant.....	do.....	10.00
Nov. 2	John F. Coffey.....	Member of bar	10.00
2	P. J. Murphy.....	do.....	10.00
2	R. H. L. Neaks.....	do.....	10.00
11	W. P. Hubbard.....	do.....	10.00
14	H. L. Faulkner.....	Notary public.	10.00
15	O. H. Lamoreaux.....	do.....	10.00
19	Jac. C. Curvin.....	do.....	10.00
26	Geo. J. Love.....	do.....	10.00
27	Geo. L. Bellows.....	do.....	10.00

*Receipts and disbursements of the Alaska Historical Library and Museum Fund from
July 1, 1918, to June 30, 1919—Continued.*

RECEIPTS—Continued.

Date.	Received from—	Title or business.	Amount.
1918.			
Nov. 30	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of November, 1918.		\$2.00
Dec. 5	R. J. DeLeo	Notary public.	10.00
26	Geo. H. Peterson	do.	10.00
30	C. T. Spencer	do.	10.00
30	John A. Shorty	do.	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of December, 1918.		8.00
1919.			
Jan. 1	E. D. Howe	Notary public.	10.00
17	Benjamin B. Mozee	do.	10.00
18	F. C. Wiseman	do.	10.00
18	Enos Hansen	do.	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of January, 1919.		20.00
Feb. 28	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of February, 1919.		77.00
Mar. 1	Chas. H. Cosgrove	Notary public.	10.00
15	T. A. Marquam	do.	10.00
15	B. B. Smith	do.	10.00
25	Arthur F. Erickson	do.	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of March, 1919.		102.00
Apr. 1	Annual interest on certificate of deposit, \$9,000, First National Bank, Juneau.		360.00
5	Frank H. Foster	Notary public.	10.00
8	J. W. Groff	do.	10.00
8	Arthur Ooghe	do.	10.00
8	N. A. Lysell	do.	10.00
11	Juanita Anderson	do.	10.00
17	D. F. Millard	do.	10.00
17	John C. Allen	do.	10.00
19	W. F. Lowe	do.	10.00
19	Joseph H. Murray	do.	10.00
24	Mrs. Mae Harrington	do.	10.00
29	R. H. L. Noaks	do.	10.00
29	F. A. Martin	do.	10.00
30	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of April, 1919.		42.00
May 13	B. T. Weyand	Notary public.	10.00
17	Chas. A. Simons	do.	10.00
17	James Christoe	do.	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of May, 1919.		14.00
June 9	Wallace Cathcart	Notary public.	10.00
9	Jno. H. Cobb	do.	10.00
16	Wm. B. Clayton	do.	10.00
17	Clyde A. Thompson	do.	10.00
18	Howard D. Stabler	do.	10.00
23	H. D. Stabler	Member of bar	10.00
24	H. W. Nagley	Notary public.	10.00
30	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of June, 1919.		8.00
	Total		13,833.15

DISBURSEMENTS.

Date.	Payment to—	Voucher No.	Amount.
1918			
July 17	West Publishing Co.	Voucher No. 25	\$10.00
18	Times Printing Co.	Voucher No. 26	9.00
18	Douglas Island News	Voucher No. 27	3.00
18	Daily Alaskan	Voucher No. 28	9.00
25	Petersburg Report	Voucher No. 29	2.50

*Receipts and disbursements of the Alaska Historical Library and Museum Fund from
July 1, 1918, to June 30, 1919—Continued.*

DISBURSEMENTS—Continued.

Date.	Payment to—	Voucher No.	Amount.
1918.			
July 25	Ketchikan Progressive Miner.....	Voucher No. 30.....	\$8.00
29	The Verstovian.....	Voucher No. 31.....	.50
31	J. V. Enette.....	Voucher No. 32.....	25.00
Sept. 23	do.....	Voucher No. 33.....	25.00
30	do.....	Voucher No. 34.....	25.00
Oct. 3	Alaska Bindery.....	Voucher No. 1.....	110.00
9	Wrangell Sentinel.....	Voucher No. 2.....	3.00
10	Seward Gateway.....	Voucher No. 3.....	10.00
10	Chitina Leader.....	Voucher No. 4.....	3.50
10	Alaska Citizen.....	Voucher No. 5.....	10.00
10	Daily Alaska Dispatch.....	Voucher No. 6.....	8.00
10	Record Citizen.....	Voucher No. 7.....	10.00
10	Wm. Britt.....	Voucher No. 8.....	2.80
10	Juneau Transfer Co.....	Voucher No. 9.....	.50
10	J. B. Lyon Co.....	Voucher No. 10.....	.25
10	Seattle Post Intelligencer.....	Voucher No. 11.....	6.50
10	A. N. Marquis & Co.....	Voucher No. 12.....	6.00
10	G. P. Putnam.....	Voucher No. 13.....	1.60
10	Pacific Fisherman.....	Voucher No. 14.....	3.00
10	Nenana News Printing Co.....	Voucher No. 15.....	15.00
10	National Geographic.....	Voucher No. 16.....	2.00
10	Nome Daily Nugget.....	Voucher No. 17.....	20.00
19	Fairbanks Daily News Miner.....	Voucher No. 18.....	12.00
31	Bob LaSelle.....	Voucher No. 19.....	25.00
Nov. 4	Alaska Daily Empire.....	Voucher No. 20.....	10.00
30	Bob LaSelle.....	Voucher No. 21.....	25.00
Dec. 4	Wells-Fargo Express.....	Voucher No. 22.....	5.52
14	Woodward & Tiernan.....	Voucher No. 23.....	175.00
20	Herald Publishing Co.....	Voucher No. 24.....	7.50
20	A. J. Johnson.....	Voucher No. 25.....	30.00
31	Bob LaSelle.....	Voucher No. 26.....	25.00
1919			
Jan. 2	Alaska Pioneer.....	Voucher No. 27.....	3.00
31	J. V. Enette.....	Voucher No. 28.....	25.00
31	Harris & Ewing.....	Voucher No. 29.....	20.00
31	Washington University State Historical Society.....	Voucher No. 30.....	2.00
31	Alaska Citizen.....	Voucher No. 31.....	20.00
Feb. 7	W. H. Case.....	Voucher No. 32.....	5.00
25	Alaska Citizen.....	Voucher No. 33.....	10.00
28	J. V. Enette.....	Voucher No. 34.....	25.00
28	R. P. Nelson.....	Voucher No. 35.....	2.00
Mar. 18	Alaska Bindery.....	Voucher No. 36.....	160.00
18	Pacific Fisherman.....	Voucher No. 37.....	1.00
31	J. V. Enette.....	Voucher No. 38.....	25.00
Apr. 14	National Geographic Society.....	Voucher No. 39.....	2.00
14	Nome Nugget.....	Voucher No. 40.....	20.00
25	Mitchell Publishing Co.....	Voucher No. 41.....	2.50
30	J. V. Enette.....	Voucher No. 42.....	25.00
May 26	D. Appleton & Co.....	Voucher No. 43.....	3.50
26	Juneau Transfer Co.....	Voucher No. 44.....	2.00
31	J. V. Enette.....	Voucher No. 45.....	25.00
June 11	Goldstein's Emporium.....	Voucher No. 46.....	5.74
11	W. H. Case.....	Voucher No. 47.....	19.00
27	G. M. Simpkins.....	Voucher No. 48.....	5.00
30	J. V. Enette.....	Voucher No. 49.....	25.00
	Total.....		1,076.91

Total receipts..... \$13,833.15
Total disbursements..... 1,076.91

Balance on hand July 1, 1919..... 12,756.24

APPENDIX B.

Register of Federal and territorial officials and employees.

FEDERAL GOVERNMENT.

INTERIOR DEPARTMENT, GOVERNOR'S OFFICE, JUNEAU.

Governor.—Thomas Riggs, jr.*Secretary to the governor.*—G. Fenton Cramer.

UNITED STATES SURVEYOR GENERAL'S OFFICE, JUNEAU

Surveyor general.—Charles E. Davidson.*Chief clerk.*—Martin George.*Chief draftsman.*—Edward P. Kendall.*Draftsman.*—Byron L. Fitch.*Financial and general clerk.*—Charles E. Naghel.*Typewriter.*—Flooma P. Crowther.

FIELD.

United States deputy surveyors.—Asa C. Baldwin, United States Army; H. P. M. Birkinbine, Seattle, Wash.; H. P. Crowther, Juneau; William A. Hesse, Cordova; Charles S. Hubbell, Seattle, Wash.; H. C. Ingram, Fairbanks; F. A. Metcalf, Juneau; William Muncaster, Seattle, Wash.; D. E. Stubbs, Aniak; F. J. Wettrick, Juneau; F. W. Williamson, Juneau; V. H. Wilhelm, Juneau; H. H. Waller, Seattle, Wash.

United States mineral surveyors.—Asa C. Baldwin, United States Army; Arthur G. Blake, Nome; H. P. Crowther, Juneau; William W. Elmer, Portland, Oreg.; William A. Hesse, Cordova; Charles S. Hubbell, Seattle, Wash.; H. C. Ingram, Fairbanks; F. A. Metcalf, Juneau; O. Adrian Nelson, Chitina; I. McK. Reed, Nome; D. B. Skinner, Port Blakely, Wash.; B. D. Stewart, Juneau; D. E. Stubbs, Aniak; H. H. Waller, Seattle, Wash.; R. F. Whitham, Olympia, Wash.; F. J. Wettrick, Juneau; V. H. Wilhelm, Juneau; F. W. Williamson, Juneau.

UNITED STATES LAND OFFICE.

Division No. 1.—Frank A. Boyle, register, Juneau.*Division No. 2.*—Thomas McGann, ex officio register, Nome; E. R. Jordan, ex officio receiver, Nome.*Division No. 3.*—Included in division No. 1.*Division No. 4.*—H. Claude Kelly, ex officio register, Fairbanks; L. T. Erwin, ex officio receiver, Fairbanks; Roscoe F. Washburn, clerk, Fairbanks.*Field division (headquarters, Juneau).*—Chief, George A. Parks; special agents, Walter B. Heisel, J. L. Backstrom; timber cruiser, H. K. Carlisle; mineral inspector, George A. Parks; clerk and stenographer, Gilbert A. Tuben.

UNITED STATES GEOLOGICAL SURVEY AND BUREAU OF MINES.

DIVISION OF ALASKAN MINERAL RESOURCES.

Theodore Chapin, geologist (in charge of Geological Survey office), Anchorage, Alaska.

United States Bureau of Mines experiment station, Fairbanks, Alaska.—J. A. Davis, superintendent; John Gross, metallurgist; Paul Hopkins, analytical chemist and metallurgist; Claude Gordon, senior clerk; George M. Landerking, mechanic; Noah R. King, carpenter; Sumner S. Smith, mine inspector for Alaska, Anchorage, Alaska; Arthur P. Gannon, clerk, Anchorage, Alaska.

UNITED STATES BUREAU OF EDUCATION.

SCHOOLS FOR NATIVES.

Commissioner of Education.—P. P. Claxton, Washington, D. C.*Superintendent of education for Alaska.*—W. T. Lopp, Seattle, Wash.*Supply agent.*—H. C. Sinclair, Seattle, Wash.

Special disbursing agent.—C. C. Bestor, Seattle, Wash.
Superintendent, southeastern district.—C. W. Hawkesworth, Juneau.
Superintendent, southwestern district.—A. H. Miller, Anchorage.
Superintendent, upper Yukon district.—F. L. Forbes, Tanana.
Acting superintendent, western district.—J. T. Sullivan, St. Michael.
Acting superintendent, northwestern district.—E. D. Evans, Nome.

Physicians.—L. H. French, Nushagak; H. C. Randle, Nulato; D. S. Neuman, Nome; L. P. Dawes, Juneau; W. H. Chase, Cordova; G. E. Howe, Ellamar (contract).
 N. M. Cook, Kotzebue.

ALASKAN ENGINEERING COMMISSION.

ANCHORAGE.

Chairman.—Col. F. Mears.
Consulting engineer.—William C. Edes.
Engineer in charge, Anchorage division, and consulting engineer.—William Gerig.
Examiner of accounts.—Burton H. Barndollar.
Engineer, maintenance of way.—F. A. Hansen.
Bridge engineer.—Walter J. H. Fogelstrom.
Special disbursing agent.—Royden D. Chase.
Trainmaster.—John T. Cunningham.
General storekeeper.—W. R. Manning.
Chief accountant.—J. C. Seeley.
Receiving and forwarding agent.—T. L. Murphy.
Resident mining engineer.—Sumner S. Smith.
Chief surgeon.—Dr. J. B. Beeson.
Chief clerk.—I. H. Fleischman.
Manager land and industrial department.—Edward T. Lindner.
Superintendent telegraph and telephone department.—Fred R. Mumma.

NENANA.

Engineer in charge, Fairbanks division.—Frederick D. Browne.
Town-site manager.—Carl Schmidt.
Special disbursing agent.—Frank T. Doner.
Chief accountant.—H. B. Joseph.
Storekeeper.—George E. Markus.
Chief surgeon.—Malcolm E. Smith.
Superintendent of transportation.—Walter B. Reaburn.

SEWARD.

Engineer in charge.—Robert J. Weir.
Assistant engineer.—G. W. Colwell.
Special disbursing agent and chief accountant.—Edgar B. Tarwater.
Storekeeper.—F. E. Youngs.
Surgeon.—J. H. Romig.

FAIRBANKS.

Special disbursing agent.—John Raap.

GAME WARDENS.

Division No. 1.—J. C. Lund, Juneau; A. E. Lucy, Ketchikan; Charlie Klontech, Sitka.
Division No. 2.—Martin O. Solberg, Nome.
Division No. 3.—J. A. Baughman, Seward; Edward A. Young, Chitina; F. A. Martin, Anchorage.
Division No. 4.—L. F. Protzman, Fairbanks; Stephen Foster, Nenana; Robert E. Steel, Eagle.

SPECIAL OFFICERS FOR SUPPRESSION OF LIQUOR TRAFFIC AMONG NATIVES.

J. F. McDonald, Juneau; Thomas P. Killeen, Nome; Joseph A. Bourke, Valdez; T. M. Italio, Yakutat; John A. Moe, Fairbanks.

DEPARTMENT OF JUSTICE.

DIVISION NO. 1.

Judge.—Robert W. Jennings, Juneau.

Court stenographer.—L. A. Green, Juneau.

Clerk of court.—J. W. Bell, Juneau.

Court librarian.—J. F. Hurley, Juneau.

Deputy clerks.—John T. Reed, Lafe E. Spray, C. Z. Denny, Juneau; William T. Mahoney, Ketchikan; Joseph J. F. Ward, Skagway.

United States marshal.—J. M. Tanner, Juneau.

Chief deputy.—W. W. Casey, jr., Juneau.

Deputy marshals.—N. O. Hardy, C. H. Passells, Juneau; George L. Johnson, Douglas; Fred E. Tanner, Skagway; J. W. Combs, Haines; J. J. Egan, Tenakee; Henry L. Bahrt, Sitka; Noah Howell, Petersburg; H. J. Wallace, Wrangell; J. K. Smith, Craig; W. B. Sharpe, Ketchikan.

United States attorney.—James A. Smiser, Juneau.

Assistant United States attorneys.—J. J. Reagan, Juneau; Steve Ragan, Ketchikan.

Clerk to United States attorney.—Ina S. Liebhardt, Juneau.

United States commissioners.—Newark L. Burton, Juneau; John Henson, Douglas; William T. Mahoney, Ketchikan; Joseph J. F. Ward, Skagway; J. J. Kennedy, Haines; M. S. Perkins, Petersburg; C. E. Weber, Wrangell; Charles A. Fox, Craig; U. S. Rush, Kasaaan; R. W. De Armond, Sitka; Walter Ramsayer, Chatham; A. H. Keuttner, Killisnoo; W. A. Borland, Hoonah; E. M. Axelson, Yakutat; Edward Marsden, Metlakatla.

DIVISION NO. 2.

Judge.—William A. Holzheimer, Nome.

Clerk of court.—Thomas McGann, Nome.

Deputy clerks.—W. C. McGuire, A. C. Dilg, Earl C. Modini, Nome.

United States marshal.—Emmet R. Jordan, Nome.

Chief deputy.—Adrian B. Miller, Nome.

Deputy United States marshals.—Fred H. Lawing, Elmer Reed, Harry Pigeon, Catherine A. Anpher, Nome; T. W. Coady, Fortuna Ledge; Bernard J. O'Reilly, St. Michael; Eric Johnson, Council; Robert H. Humber, Candle.

United States attorney.—Gubrand J. Lomen, Nome.

United States commissioners.—Hugh O'Neill, Nome; D. W. Cram, Barrow; Rodney S. Dimmick, Candle; John D. Flanigan, Council; George L. Stanley, Kiana; George C. Marsh, Fortuna Ledge; Charles J. Koen, St. Michael; W. J. Worcester, Taylor; William N. Marx, Teller; Henry Sethmann, Haycock; W. A. Thomas, Point Hope.

DIVISION NO. 3.

Judge.—Fred M. Brown, Valdez.

Court stenographer.—Isaac Hamburger, Valdez.

Clerk of court.—Arthur Lang, Valdez.

Deputy clerks.—Charles H. Wilcox, John B. Miller, Pauline L. Lang, Valdez; Leopold David, Anchorage; W. H. Whittlesey, Seward; Thomas S. Scott, Cordova.

United States marshal.—F. R. Brenneman, Valdez.

Chief deputy.—J. H. D. Bouse, Valdez.

Deputy United States marshals.—A. C. Dowling, S. O. Casler, John A. Roseen, Valdez; C. W. Mossman, Anchorage; William L. Fursman, Cordova; W. J. Feaster, Chitina; Isaac Evans, Seward; Karl Armstrong, Kodiak; Charles McCallum, Unga; Paul Buckley, Unalaska; W. F. Lows, Dillingham; James M. Millsap, McCarthy; A. F. Hoffman, Matanuska; V. L. Sedgwick, Naknek; C. W. Harrington, Seldovia; H. R. Brown, Talkeetna; H. M. Conrad, Latouche.

United States attorney.—William A. Munly, Valdez.

Assistant United States attorneys.—Hilliard G. Bennett, Valdez; J. L. Truitt, Anchorage.

United States commissioners.—N. E. Bolshanin, Unalaska; L. H. French, Dillingham; William O'Connor, Chitina; C. Parker Smith, McCarthy; R. H. L. Noaks, Cordova; Fred Phillips, Iliamna; Charles C. Naughton, Katalla; Leopold David, Anchorage; Z. T. Hallerty, Kodiak; William Neilsen, Naknek; William H. Whittlesey, Seward; John F. Coffey, Talkeetna; F. C. Driffield, Unga; George J. Love, Valdez; Anthony McGettigan, Chisana.

Commissioners with powers of justice of the peace only.—Royden D. Chase, Anchorage; Herbert M. Pratt, Kenai; Ralph V. Anderson, Seldovia; Alexander H. Proctor, St. George Island; F. G. Dodge, United States Coast Guard cutter *Unalga*.

DIVISION NO. 4.

Judge.—Charles E. Bunnell, Fairbanks.
Court stenographer.—E. T. Wolcott, Fairbanks.
Clerk of court.—H. Claude Kelly, Fairbanks.
Deputy clerks.—Frank B. Hall, R. H. Geoghegan, Grace Fisher, Fairbanks; William B. Thomas, Flat; Thomas J. DeVane, Ruby.
Assistant clerk.—Ella Knudsen, Fairbanks.
United States marshal.—L. T. Erwin, Fairbanks.
Chief deputy marshal.—J. H. Miller, Fairbanks.
Deputy marshals.—M. O. Carlson, Marion Creamer, John C. Wood, Peter McMullen, Charles O. Fowler, Fairbanks; E. H. Poppell, Chatanika; G. G. Geraghty, Flat; C. L. Vawter, Tanana; John B. Powers, Eagle; Thomas H. Long, Ruby; E. D. Heppenstall, Wiseman; J. L. Anders, Hot Springs; C. T. Spencer, Circle; P. R. McGuire, Fort Yukon; M. F. Miller, Brooks; James Hagan, Nenana.
United States attorney.—R. F. Roth, Fairbanks.
Assistant United States attorneys.—Harry E. Pratt, Fairbanks; E. Coke Hill, Ruby.
Clerk to United States attorney.—Emma Haggren, Fairbanks.
United States commissioners.—Howard J. Atwell, Livengood; Thomas G. Carter, Beaver City; John J. Donovan, Franklin; Joseph C. Dehn, Tanana; Thomas J. DeVane, Ruby; Wilbur F. Green, McGrath; A. J. Griffin, Richardson; William E. Garrett, Rampart; Reed W. Heilig, Fairbanks; Preston J. Hilliard, Eagle; Thomas Hunter, Circle; George W. Hoffman, Napamute; Howard R. Moore, Flat; Vance R. McDonald, Long City; Robert S. McDonald, Nenana; B. B. Smith, Ophir; C. Herbert Wilson, Kantishna; Samuel R. Weiss, Chatanika; Frank C. White, Fort Yukon; Daniel Webster, Wiseman; William O. Young, Hot Springs.

DEPARTMENT OF COMMERCE.

BUREAU OF FISHERIES.

Agent at large.—Ward T. Bower, Washington, D. C.
Assistant agents at large.—E. M. Ball, Cordova; H. J. Christoffers, Seattle; C. F. Townsend, Fairbanks.
Inspector.—E. P. Walker, Juneau.
Wardens at large.—H. C. Scudder, Juneau; C. L. Larson, Chicken; Fred H. Gray, Wrangell; Shirley A. Baker, Dillingham; Lemuel G. Wingard, Naknek; Philip R. Hough, Wrangell; M. J. O'Connor, Haines.
Agent and caretaker.—A. H. Proctor, St. Paul Island.
Storekeeper.—G. Dallas Hanna, St. Paul Island.
Physician.—Dr. H. H. Stromberger, St. Paul Island.
Teachers.—Mr. and Mrs. George Haley, St. Paul Island.
Assistant.—W. C. Allis, St. Paul Island.
Storekeeper.—Henry D. Aller, St. George Island.
Physician.—Dr. C. E. Johnson, St. George Island.
Teacher.—Charles E. Crompton, St. George Island.
Superintendents of fisheries stations.—Edwin Wentworth, Afognak; C. H. van Atta, Yes Bay.
Master fisheries steamer Osprey.—Edwin Hofstad.

STEAMBOAT-INSPECTION SERVICE.

JUNEAU DISTRICT.

Local inspector of hulls.—George H. Whitney, Juneau.
Local inspector of boilers.—Peter G. Peltret, Juneau.
Clerk to local inspectors.—George E. Mann, Juneau.

ST. MICHAEL DISTRICT, ST. MICHAEL.

Local inspector of hulls.—Harry W. Ravens.
Local inspector of boilers.—Savine L. Craft.
Clerk to local inspectors.—Jerome A. Desio.

LIGHTHOUSE SERVICE.

SIXTEENTH DISTRICT, KETCHIKAN.

Superintendent.—Walter C. Dibrell.

First assistant superintendent.—Clarence H. Robinson.

Second assistant superintendent.—Charles N. Elliot.

Chief clerk.—Albert B. Edmonds.

Clerks.—Tony J. Zimmerman, Ethel H. Rudge, A. Mary Mitchell.

Depot keeper.—Rolf Fosneess.

Mechanician.—William J. Wright.

Foreman.—Michael Harris.

TREASURY DEPARTMENT.

INTERNAL REVENUE.

Field deputy.—Charles C. John, Juneau.

Stamp deputy.—George Hutchinson, Fairbanks.

PUBLIC HEALTH SERVICE.

Medical officers.—W. W. Council, Cordova; Leonard O. Sloane, Juneau; H. C. Story, Ketchikan; J. M. Sloan, Seward; J. A. Silverman, Valdez.

CUSTOMS SERVICE.

Collector.—John W. Troy, Juneau.

Special deputy collector.—C. D. Garfield, Juneau.

Deputy collectors and inspectors.—M. S. Whittier, George M. Simpkins, Juneau; George W. Woodruff, John L. Abrams, Ketchikan; G. G. Miller, Skagway; A. P. Kashevaroff, Nakat Inlet.

Deputy collectors in charge.—Milton S. Dobbs, Ketchikan; F. E. Bronson, Wrangell; Fred J. Vandewall, Skagway; H. R. Raffelson, Suiter; R. W. J. Reed, Nome; Edwin R. Stivers, St. Michael; Henry W. Hutchings, Cordova; N. E. Bolshamin, Unalaska; J. J. Hillard, Eagle; John Elden, Fortymile.

DEPARTMENT OF AGRICULTURE.

EXPERIMENTAL STATIONS.

Agronomist in charge.—C. C. Georgeson, D. Sc., Sitka.

Assistants in charge.—M. D. Snodgrass, B. Sc., Fairbanks; G. W. Gasser, B. Sc., Rampart; F. E. Raeder, B. Sc., Matanuska; W. T. White, B. Sc., Kodiak.

Assistant.—B. C. Parker, D. V. M., Kodiak.

Clerk and stenographer.—E. Hansen, Sitka.

WEATHER BUREAU.

Meteorologist in charge.—Melvin B. Summers, Juneau.

Observer.—Elden W. Day, Juneau.

Special meteorological observers.—Mrs. Eliza M. Turnbull, Eagle; Clarence L. Lovegren, Nome; Mrs. Margaret T. Georgeson, Sitka; Joseph C. Dehn, Tanana; Mrs. Myrtle F. Billings, Valdez.

FOREST SERVICE.

Tongass National Forest.

Forest supervisor.—Charles H. Flory, Ketchikan.

Deputy forest supervisor.—B. F. Heintzleman, Ketchikan.

Clerk and special fiscal agent.—J. M. Wyckoff, Ketchikan.

Stenographer and typewriter.—Mabel Bell, Ketchikan.

Forest rangers.—C. T. Gardner, Ketchikan; H. E. Smith, Craig; J. L. MacKechnie, Petersburg; W. G. Hellan, Juneau; G. H. Peterson, Sitka.

Forest assistant.—R. E. Smith, Ketchikan.

Assistant engineer, Geological Survey, in charge of stream gauging work in cooperation with the Forest Service.—George H. Canfield, Juneau.

*Chugach National Forest.**Forest superintendent.*—Charles H. Mory, Ketchikan.*Forest supervisor.*—C. T. Beach, Cordova.*Forest rangers.*—C. A. Nettleton, Katalla; W. J. McDonald, Cordova; G. C. Hanesman, Seward.*Forest clerk.*—L. C. Pratt, Cordova.

WAR DEPARTMENT.

BOARD OF ALASKA ROAD COMMISSIONERS, JUNEAU.

President and engineer officer.—W. H. Waugh, major, Engineers, United States Army.*Assistant engineer officer.*—John Zug, captain, Engineers, United States Army.*Disbursing officer.*—Sidney L. Carter, first lieutenant, Engineers, United States Army.

POST OFFICE DEPARTMENT.

EMPLOYEES, NOT INCLUDING POSTMASTERS IN THE POSTAL SERVICE IN ALASKA.

Fairbanks.—Clarke, Whitney W., assistant postmaster; Eddy, C. S., Hering, E. A., Honak, E. M., Ralston, T., and Smith, L. G., clerks.*Juneau.*—Manning, Beesie C., assistant postmaster; Kimball, Charles E., Collins, Lillian G., Museth, Verna, Sabin, Charles A., and Tilton, Lois E., clerks; Bradford, Gertrude, substitute clerk.*Ketchikan.*—Leahy, Agnes M., Robinson, Mary T., Warder, Alice E., and Wile, Albert, clerks.

RAILWAY MAIL SERVICE.

Tanana.—E. G. Wetzler, assistant chief clerk.*Cordova.*—Alvah Eames, assistant chief clerk.

CONGRESSIONAL.

Delegate to Congress.—George B. Grigsby, Washington, D. C.*Secretary to Delegate.*—John J. Reagan, Washington, D. C.

TERRITORIAL GOVERNMENT, JUNEAU.

OFFICE OF THE GOVERNOR.

Governor.—Thomas Riggs, jr.*Clerk to the governor.*—G. W. Folta.*Clerk.*—Frances Meisenzahl.

OFFICE OF THE SECRETARY.

Ex officio secretary.—Robert J. Sommers.*Chief clerk.*—A. W. Fox.*Assistant clerk.*—Celia McLaughlin.

TREASURY.

Treasurer.—Walstein G. Smith.*Chief clerk.*—Charles E. Harland.

OFFICE OF THE ATTORNEY GENERAL.

Attorney general.—Jerry C. Murphy.*Clerk to attorney general.*—Dekia D. Chace.*Mine inspector (ex officio labor commissioner).*—Robert J. Sommers.

PUBLICITY BUREAU.

Chief.—E. J. White.*Assistant chief.*—J. A. Baxter.

OFFICE OF COMMISSIONER OF EDUCATION.

Commissioner of education.—Lester D. Henderson.

Secretary to commissioner.—Margaret Scott.

BOARDS AND COMMISSIONS AUTHORIZED BY TERRITORIAL LEGISLATURE.

BOARD OF EDUCATION.

President.—Gov. Thomas Riggs, jr.

Members.—John Sundback, Nome; John Ronan, Seward; J. R. Heckman, Ketchikan; D. A. Sutherland, Poorman.

SHIPPING BOARD.

Chairman.—Gov. Thomas Riggs, jr.

Secretary.—Charles E. Davidson.

Treasurer.—Walstein G. Smith.

Clerk.—G. F. Cramer.

Counsel.—Maurice D. Leehey.

BANKING BOARD.

President.—Gov. Thomas Riggs, jr.

Secretary.—Walstein G. Smith.

Member.—Charles E. Davidson.

BOARD OF TRUSTEES, PIONEERS' HOME.

President.—Gov. Thomas Riggs, jr.

Secretary.—Allen Shattuck.

Treasurer.—W. W. Casey.

Superintendent of home.—Harry F. Morton, Sitka.

BOARD OF ROAD COMMISSIONERS.

Chairman.—Gov. Thomas Riggs, jr.

Secretary.—Charles E. Davidson.

Member.—Walstein G. Smith.

DIVISIONAL BOARDS OF ROAD COMMISSIONERS.

Division No. 1.

Commissioner.—Perry Wiley, Juneau.

Assistants.—Thomas Knudson, Martin J. Bugge, Juneau.

Division No. 2.

Commissioner.—Barney Gibney, Nome.

Assistants.—E. H. Pfaffle, Council.

Division No. 3.

Commissioner.—James E. Wilson, Valdez.

Assistants.—George H. Merrifield, Valdez; O. O. Krough, Anchorage.

Division No. 4.

Commissioner.—Robert E. Sheldon, Fairbanks.

Assistants.—Peter Jensen, Ruby; J. E. Barrack, Fairbanks.

BOARD OF FISH COMMISSIONERS.

Chairman.—Gov. Thomas Riggs, jr.

Members.—A. J. Adams, Cordova; John R. Beegle, Ketchikan; Hugh Dougherty, Seward; Charles D. Garfield, Juneau.

BOARD OF REGENTS, AGRICULTURAL COLLEGE AND SCHOOL OF MINES.

L. S. Keller, Skagway; L. F. Shaw, Anchorage; P. J. Rickert, Mrs. Luther C. Hess, A. R. Heilig, H. Claude Kelly, A. C. Nordale, A. J. McIntosh, Fairbanks.

HEALTH DEPARTMENT.

Commissioner of health.—Dr. L. O. Sloane, Juneau.
Assistants.—W. W. Council, Cordova; Curtis Welch, Nome; J. A. Sutherland, Fairbanks.

BUREAU OF VITAL STATISTICS.

Registrar.—Charles E. Davidson, Juneau.
Clerk.—Celia McLaughlin, Juneau.

BOARD OF MEDICAL EXAMINERS.

President.—B. L. Myers, Ketchikan.
Secretary-treasurer.—L. O. Sloane, Juneau.
Members.—D. S. Neuman, Nome; Curtis Welch, Council; M. J. Sloan, Seward; J. H. Romig, Seward; Aline B. Bradley, Fairbanks; H. M. McCallum, Fairbanks.

BOARD OF DENTAL EXAMINERS.

President.—W. E. Zuber, Ketchikan.
Secretary-treasurer.—E. H. Kaser, Juneau.
Members.—L. W. Fromm, Nome; Robert R. Myers, Nenana.

BOARD OF PHARMACY.

President.—W. B. Kirk, Juneau.
Secretary.—D. H. Christoe, Douglas.
Members.—W. H. Caswell, Cordova; C. G. Brinker, Nome; Russell Herman, Valdez; F. W. Dunham, R. T. Kubon, Fairbanks; William Ramsey, Council.

BOARD OF CHILDREN'S GUARDIANS.

Division No. 1—Members.—Robert W. Jennings, J. M. Tanner, Mrs. Martha Kashevaroff, Juneau.
Division No. 2—Members.—W. A. Holzheimer, E. R. Jordan, Miss Emma Lee Orr, Nome.
Division No. 3—Members.—Fred M. Brown, F. R. Brenneman, Mrs. T. J. Donohoe, Valdez.
Division No. 4—Members.—Charles E. Bunnell, Lewis T. Erwin, Mrs. Luther C. Hess, Fairbanks.

BOARD FOR RELIEF OF DESTITUTION.

Superintendent.—Gov. Thomas Riggs, jr., Juneau.
Advisory members.—James A. Smiser, J. M. Tanner, Juneau; G. J. Lomen, E. R. Jordan, Nome; Wm. A. Munly, F. R. Brenneman, Valdez; R. F. Roth, Lewis T. Erwin, Fairbanks.

IMMIGRATION SERVICE.

Inspector in charge.—William G. Strench, Ketchikan.
Immigrant inspectors.—Charles W. Durkee, jr., Ketchikan; Walter H. Stowers, Skagway.

APPENDIX C.

IMPORTS AND EXPORTS.

ANNUAL REPORT OF THE COLLECTOR OF CUSTOMS FOR THE CALENDAR YEAR 1918.

UNITED STATES CUSTOMS SERVICE,
OFFICE OF THE COLLECTOR,
Port of Juneau, Alaska, February 1, 1919.

In presenting this report for the calendar year 1918 attention is called to the disturbed condition of the whole country due to the conflict of nations which retarded the forward stride of the Territory of Alaska during that period. This was to be

expected, as the winning of the war demanded the direction of all forces, in their various elements, to the greatest endeavor for that purpose.

Being without munition manufactures or shipbuilding our man power, other than that inducted into the military service, was attracted by these industries elsewhere, thus materially reducing the production of precious and other metals. Owing to the employment of women and children and a great number of natives the fisheries did not suffer so much from this cause, for by the utilization of every means at hand with increased speed, the industry was not only maintained, but the output augmented.

The Territory is wholly dependent upon water transportation for the carrying of its trade, and on account of a considerable portion of the usual shipping being diverted to other channels, it became necessary to equalize production with marketing facilities.

As the result of these and other causes the commerce of the Territory decreased to the extent of \$14,000,000.

With return of normal conditions during the ensuing year it is predicted that the development of Alaska will be renewed with vigor, the exploitation of natural resources proceed more rapidly, and its business greatly enhanced.

In the following table the items imports and exports of foreign gold and silver and a large portion of the exports foreign, are in transit commerce and not considered as actual trade of the Territory. The prohibited exportation of Canadian gold and silver from the Yukon district, as a war measure, greatly reduced the volume of that business and the closing down of mining operations in that region lessened the exports of merchandise foreign.

Commerce of Alaska.

	Calendar years.						
	1912	1913	1914	1915	1916	1917	1918
IMPORTS.							
Merchandise from the United States.....	\$21,992,761	\$21,689,690	\$21,610,860	\$23,293,168	\$30,834,793	\$39,828,168	\$40,412,258
Merchandise from foreign ports.....	925,924	751,173	662,994	500,519	1,544,152	1,196,180	1,175,701
Gold and silver from foreign ports.....	3,840,546	4,820,965	3,578,090	4,228,620	2,936,018	2,267,237	37,605
Total imports.....	26,758,341	26,761,848	25,849,944	28,017,307	35,314,963	44,431,600	41,625,564
EXPORTS.							
Merchandise to the United States.....	24,796,899	22,262,942	25,427,373	34,245,272	62,507,811	76,651,968	75,026,578
Merchandise and gold and silver to foreign ports.....	1,636,780	1,246,878	1,047,746	1,225,129	1,873,013	3,098,890	1,315,975
Domestic gold and silver to United States.....	16,031,705	12,959,266	14,729,995	16,099,411	16,332,117	14,929,449	8,997,065
Foreign gold and silver to United States.....	3,704,173	4,306,591	3,450,400	3,206,012	3,909,509	2,606,864	53,960
Total exports.....	46,166,544	40,767,677	44,655,924	54,866,815	84,622,450	96,693,862	85,423,568
Grand total of imports and exports.....	72,924,885	67,529,525	70,505,868	82,874,122	119,937,413	141,125,462	127,049,132

To the proper items in the following table should be added the contents of copper ore exported from southeastern Alaska to British Columbia for treatment, to wit:

Ore.....	tons..	19,940
Copper contents.....	pounds..	1,505,878
Copper.....		\$370,914
Gold.....		24,061
Silver.....		8,208
Platinum.....		3,814
Total.....		407,017

Also, in order to arrive at the total value of fish products, the following exports of this commodity foreign should be added to the appropriate items in the table:

	Quantity.	Value.
	<i>Pounds.</i>	
Salmon, fresh.....	1,937,898	\$145,751
Halibut, fresh.....	3,613,849	338,960
Cod, fresh.....	513,809	14,486
Herring, salt.....	261,200	29,086
Cod, salt.....	200	10
Salmon, canned.....	72	12
Total.....		529,164

The sum of these items being added to the total shipments of merchandise, etc., from Alaska to the United States, gives the grand total of such shipments of products of the Territory as \$84,926,414. The same for last year was \$92,702,692.

While this year there has been a gain in fish products of over \$5,000,000 and in furs of about \$2,000,000, there has been a loss in copper of \$9,000,000 and gold of \$6,000,000, making a net loss of \$8,000,000 in value.

The insistent demand for food stimulated the fishing industry. The most notable gain is in the pickled class, consisting largely of salt herring. An increase will also be observed in "all other salmon," which covers the dried, smoked, mild cured, and salted product.

Several causes have operated toward the curtailment of the output of metals, principally shortage of labor, high price of supplies and materials, and lack of transportation. Many placer mines of the Yukon Basin and Seward Peninsula closed down rather than operate at small margin of profit or probable loss. Most of the copper mines were in operation, but not up to capacity, on account of the labor situation. The same condition extended to the gold-lode mines.

Value of merchandise and gold and silver shipped from Alaska to United States.

Articles.	1915		1916	
	Quantity.	Value.	Quantity.	Value.
Antimony ore..... tons.....	1,021		1,408	
..... pounds.....	1,288,304	\$189,345	1,724,177	\$178,215
Copper ore..... tons.....	198,576		182,038	
..... pounds.....	69,366,106	12,354,163	135,289,219	28,534,039
Fish:				
Fresh, other than salmon..... do.....	9,394,329	498,653	10,350,320	612,797
Dried or cured..... do.....	5,609,574	151,472	5,208,562	286,649
Pickled..... barrels.....	10,179	89,876	18,849	280,982
Salmon, canned..... pounds.....	210,110,632	17,892,377	237,764,309	21,567,123
Salmon, all other..... do.....		604,271	12,972,281	987,695
Herring, canned..... do.....			860,549	123,066
Clams, canned..... do.....			281,232	33,808
Shrimp..... do.....			66,340	3,376
All other fish..... do.....		89,363		61,635
Fish fertilizers..... tons.....	699	26,585	855	29,161
Fish and whale oils..... gallons.....	356,897	300,352	897,694	349,470
Total fish products ..		19,655,239		24,183,252
Fur and fur skins.....		411,401		919,998
Gypsum..... tons.....	16,450	65,800	13,275	55,100
Lead ore..... tons.....	1,653		3,768	
Lead bullion..... pounds.....	586,991	34,032	1,278,216	79,277
Marble..... do.....	12,548	642	19,952	1,485
Marble..... tons.....		105,189		85,623
Tin ore..... tons.....	184	46		
..... pounds.....	185,472	79,471	189,129	54,147
Lumber..... feet b. m.....				
Tungsten ore..... pounds.....			68,620	54,870
Refrigerator meat..... do.....	13,486	2,949	4,247	627
All other Alaska merchandise.....		87,373		46,308
Gold and silver.....		16,090,411		16,332,117
United States goods returned.....		1,261,970		1,527,700
Foreign goods.....		220,448		756,674
Total.....		50,554,515		79,808,432

Value of merchandise and gold and silver shipped from Alaska to United States—Con.

Articles.	1917		1918	
	Quantity.	Value.	Quantity.	Value.
Antimony ore.....	78 tons.....			
	70,862 pounds.....	\$8,973		\$184
Copper ore.....	199,014 tons.....		155,050	
	100,740,856 pounds.....	27,243,510	73,639,098	18,156,051
Fish:				
Fresh, other than salmon.....	do.....	12,747,266	1,112,602	10,437,184
Dried or cured.....	do.....	6,524,525	292,805	5,132,889
Pickled.....	barrels.....	27,964	295,621	96,471
Salmon, canned.....	pounds.....	265,452,307	41,478,514	305,802,850
Salmon, all other.....	do.....	16,641,213	1,296,224	21,372,523
Herring, canned.....	do.....	1,663,580	243,549	1,685,826
Clams, canned.....	do.....	1,997,019	261,245	978,737
Shrimp.....	do.....	83,930	8,232	49,700
All other fish.....	do.....		60,264	104,679
Fish fertilizers.....	tons.....	1,196	37,752	1,152
Fish and whale oils.....	gallons.....	1,015,167	706,674	1,019,568
Total fish products.....		45,793,452		51,219,796
Fur and fur skins.....		379,580		2,281,732
Gypsum.....	tons.....	10,950	43,800	1,050
Lead ore.....	tons.....	2,866		1,815
Lead bullion.....	pounds.....	1,565,683	121,946	1,013,954
Marble.....	do.....	123,339	9,156	89,988
Tin ore.....	tons.....		72,406	2,992
	pounds.....	219		179
Lumber.....	feet b. m.....	219,894	114,462	282,833
Tungsten ore.....	pounds.....	96,000	3,380	1,043,000
Reindeer meat.....	pounds.....	20,160	19,550	18,140
All other Alaska merchandise.....	do.....	38,265	6,531	99,174
Gold and silver.....		65,621		132,698
United States goods returned.....		14,939,440		8,997,655
Foreign goods.....		2,283,125		2,437,393
		536,446		835,080
Total.....		91,591,408		83,984,233

Merchandise shipped from United States to Alaska.

Judicial divisions.	1912	1913	1914	1915	1916	1917	1918
First.....	\$9,769,224	\$9,725,472	\$11,075,532	\$10,329,411	\$13,569,867	\$14,049,468	\$19,058,704
Second.....	2,964,096	2,741,588	1,913,936	2,076,745	1,776,400	1,992,533	1,229,083
Third.....	6,560,461	6,314,946	6,018,269	8,710,344	11,935,320	19,234,642	17,385,299
Fourth.....	2,698,980	2,907,684	2,608,123	2,176,668	3,533,206	4,561,525	1,839,172
Total.....	21,992,761	21,689,690	21,610,860	23,293,168	30,824,793	39,838,168	40,412,258

Gold and silver shipped to the United States.

Judicial divisions.	1912	1913	1914	1915	1916	1917	1918
First.....	\$4,040,858	\$3,586,164	\$4,177,069	\$5,350,209	\$5,638,387	\$4,592,716	\$3,254,587
Second.....	3,138,881	2,239,067	2,602,273	2,796,952	3,035,631	2,573,196	1,172,910
Third.....	734,507	592,008	1,491,248	1,649,453	1,523,206	1,321,381	1,325,901
Fourth.....	8,117,459	6,542,037	6,399,315	6,298,797	6,134,893	6,452,157	3,244,257
Total.....	16,031,705	12,959,266	14,729,905	16,090,411	16,332,117	14,939,440	8,997,655

Merchandise shipped to the United States.

Judicial divisions.	1916	1917	1918
First.....	\$16,566,723	\$25,885,753	\$27,546,912
Second.....	289,636	702,118	1,086,068
Third.....	45,156,608	49,432,283	46,006,370
Fourth.....	474,854	631,814	387,206
Total.....	62,507,811	76,651,968	75,026,578

These tables show the segregation by judicial divisions for several years of shipments of merchandise from, and precious metals and merchandise to, the United States.

The following table of passenger movement for six years indicates the travel, by regularly established routes, to and from the district and the Yukon territory. Tourist and cannery employees bound for remote places are not included.

The Eagle and Dawson movement shows the local frontier travel, which must not be considered with the general account, as the greater number of these passengers arrived at or departed from Ketchikan or St. Michael and have been accounted for in their return.

	1913	1914	1915	1916	1917	1918
Arrivals from the United States and British Columbia:						
Southeastern, southern, and western Alaska.....	21,963	23,823	25,548	27,528	25,749	18,429
Nome, St. Michael, and Bering Sea.....	1,796	1,491	1,455	1,078	1,281	611
Total.....	23,758	25,313	27,003	28,606	27,030	19,040
Departures to the United States and British Columbia:						
Southeastern, southern, and western Alaska.....	21,376	22,645	19,793	25,426	30,089	26,854
Nome, St. Michael, and Bering Sea.....	2,974	1,893	1,614	1,433	1,170	878
Total.....	24,350	24,538	21,407	26,859	31,259	27,732
Arrivals at Eagle from Dawson, Yukon territory.....	914	785	1,066	1,182	759	387
Departures from Eagle to Dawson, Yukon territory.....	1,448	1,102	873	727	674	1,217
Total.....	2,362	1,887	1,939	1,909	1,433	1,604

Comparative statement of imports and exports for 15 years.

1904.....	\$53,417,799	1912.....	\$72,924,885
1905.....	54,116,582	1913.....	67,529,525
1906.....	63,488,294	1914.....	70,505,868
1907.....	48,280,512	1915.....	82,874,122
1908.....	53,776,804	1916.....	119,937,443
1909.....	58,923,143	1917.....	141,125,462
1910.....	55,000,337	1918.....	127,049,132
1911.....	57,754,847		

Comparative statement of Alaska products shipped from Alaska to the United States for 15 years.

1904.....	\$19,655,911	1912.....	\$40,354,178
1905.....	22,065,733	1913.....	34,693,590
1906.....	30,759,159	1914.....	40,157,778
1907.....	27,682,263	1915.....	50,335,683
1908.....	30,299,788	1916.....	79,051,758
1909.....	31,686,112	1917.....	90,064,962
1910.....	28,660,279	1918.....	81,0290,08.
1911.....	33,856,264		

The tables following give the value of merchandise shipped to Alaska from the United States for the year 1918 segregated as to place of consignment, with comparative statements for 5 years, and customs transactions for 13 years.

Value of merchandise shipped from the United States to first division.

Auk Bay.....	\$80, 589	Petersburg.....	\$987, 891
Burnett Inlet.....	116, 600	Pillar Bay.....	280, 433
Cape Edwards.....	208, 726	Port Conclusion.....	48, 848
Chatham.....	263, 233	Port Althorp.....	419, 842
Chichagof.....	71, 800	Port Armstrong.....	44, 647
Chilkoot.....	152, 611	Port Walter.....	847, 589
Chomley.....	166, 542	Port Ashton.....	27, 984
Craig.....	317, 428	Point Ward.....	110, 426
Douglas.....	169, 792	Pybus Bay.....	64, 871
Dundas.....	251, 207	Quadra.....	418, 420
Excursion Inlet.....	439, 286	Red Bluff Bay.....	91, 714
Funter Bay.....	267, 697	Roe Point.....	100, 701
Gambier Bay.....	165, 288	Rose Inlet.....	230, 378
Glacier Bay.....	24, 200	Saginaw Bay.....	82, 861
Gypsum.....	26, 098	Santa Ana.....	44, 987
Haines.....	209, 663	Shakan.....	196, 299
Hawk Inlet.....	329, 914	Sitka.....	343, 811
Heceta.....	123, 231	Skagway.....	177, 778
Hidden Inlet.....	97, 156	Skowl Arm.....	85, 828
Hoonah.....	377, 292	Sulzer.....	16, 630
Hunters Bay.....	43, 789	Taku Harbor.....	393, 898
Hydaburg.....	44, 010	Tee Harbor.....	111, 256
Juneau.....	2, 622, 663	Tenakee.....	205, 375
Kake.....	233, 307	Thane.....	259, 275
Karheen.....	169, 364	Token.....	20, 364
Kasaan.....	408, 540	Treadwell.....	260, 230
Ketchikan.....	3, 581, 906	Tyee.....	35, 092
Killisnoo.....	203, 150	Todd Inlet.....	74, 715
Klawock.....	124, 993	Union Bay.....	110, 372
Lake Bay.....	85, 585	Ward Cove.....	13, 381
Letnikof Cove.....	27, 426	Washington Bay.....	20, 345
Lisiansky.....	34, 910	Waterfall.....	170, 154
Loring.....	401, 100	Wrangell.....	806, 056
Metlakatla.....	253, 785	Yakutat.....	234, 110
Moir Sound.....	59, 976	Yes Bay.....	291, 133
Nakat Inlet.....	97, 350		
Noyes Island.....	110, 678	Total.....	19, 958, 704

Comparative statement of principal places in first division.

Name.	1914	1915	1916	1917	1918
Douglas.....	\$495, 482	\$489, 760	\$565, 181	\$350, 975	\$169, 792
Haines.....	274, 273	214, 705	228, 607	230, 029	209, 663
Juneau and Thane.....	4, 017, 710	3, 597, 231	4, 277, 684	3, 328, 741	2, 861, 968
Ketchikan.....	1, 548, 228	1, 190, 888	1, 935, 603	2, 446, 764	3, 581, 906
Loring.....	126, 655	100, 682	150, 648	89, 493	401, 100
Petersburg.....	246, 586	242, 976	435, 992	685, 016	987, 891
Sitka.....	167, 451	142, 376	165, 672	224, 083	343, 811
Skagway.....	390, 561	471, 388	423, 274	356, 950	177, 778
Treadwell.....	1, 002, 372	1, 002, 931	1, 332, 303	517, 783	260, 230
Wrangell.....	355, 558	369, 446	518, 880	640, 427	806, 056
All other places.....	2, 450, 736	2, 607, 038	3, 556, 128	5, 170, 207	10, 138, 539
Total.....	11, 075, 532	10, 329, 411	13, 589, 867	14, 049, 468	19, 958, 704

Value of merchandise shipped from United States to second division.

Andreofsky.....	\$127,405	Candle.....	\$23,190
Bonanza.....	5,313	Deering.....	17,179
Council.....	35,990	Keewalik.....	4,297
Golovin.....	111,880	Kotzebue.....	61,966
Kiana.....	9,238	Marshall.....	30,770
Kuskokwim.....	1,103	Nome.....	393,489
Mountain Village.....	5,900	Point Barrow.....	54,362
Old Hamilton.....	12,065	Solomon.....	21,646
Point Hope.....	1,444	Taylor.....	3,357
St. Michael.....	176,004	Unalakleet.....	13,221
Teller.....	35,960		
York.....	1,862	Total.....	1,299,083
Bethel.....	81,442		

Comparative statement of principal places in second division.

Name.	1914	1915	1916	1917	1918
Andreofsky.....			\$3,149	\$26,360	\$127,405
Candle.....	\$46,799	\$37,802	29,340	35,724	23,190
Deering.....	37,445	29,713	22,110	65,837	17,179
Golovin.....	76,024	60,370	94,520	129,999	111,180
Marshall.....	1,874	8,153	93,864	110,043	30,770
St. Michael.....	387,492	540,245	287,807	447,959	176,004
Nome.....	926,808	1,110,345	1,049,245	882,496	393,489
Teller.....	40,803	55,269	28,646	65,851	21,646
All other places.....	376,691	225,839	178,699	238,265	312,906
Total.....	1,913,936	2,076,745	1,776,400	1,992,533	1,299,083

Value of merchandise shipped from United States to third division.

Abercrombie.....	\$93,318	Matanuska.....	\$4,671
Afognak.....	17,256	Morzhovoi Bay.....	157,473
Akiak.....	20,232	Naknek.....	431,185
Akutan.....	331,164	Nellie Juan.....	47,732
Alagnak.....	196,014	Nelson Lagoon.....	69,161
Alitak.....	362,900	Nushagak.....	877,247
Anchorage.....	1,433,072	Orca.....	178,241
Apokak.....	42,872	Pavlof.....	36,371
Bristol Bay.....	3,240,622	Pirate Cove.....	37,452
Chignik.....	496,870	Port Graham.....	136,888
Chitina.....	163,856	Port Moller.....	241,621
Cold Bay.....	12,224	Quinhagak.....	5,513
Cook Inlet.....	116,014	Sanak.....	8,969
Cordova.....	2,108,776	Sand Point.....	32,348
Drier Bay.....	61,106	Seldovia.....	248,903
Eku.....	115,629	Seward.....	1,361,803
Ellamar.....	79,120	Shepards Point.....	29,551
Fidalgo Bay.....	18,154	Shushanna.....	18,925
Fort Liscom.....	61,465	Snug Harbor.....	17,408
Halibut Cove.....	47,415	Squaw Harbor.....	96,188
Herendeen Bay.....	142,911	Strelna.....	28,040
Ikatan.....	242,643	Susitna.....	6,779
Katalla.....	68,769	Ugaguk.....	251,385
Kenai.....	378,656	Ugashik.....	7,440
Kennecott.....	764,581	Unalaska.....	174,752
King Cove.....	181,316	Unga.....	141,203
Kodiak.....	223,368	Uyak.....	118,773
Kogitung.....	317,377	Valdez.....	384,020
Kvichak.....	79,684	Wasilla.....	13,860
Latouche.....	535,430		
Libbyville.....	143,232	Total.....	17,385,299
McCarthy.....	125,351		

Comparative statement of principal places in third division.

Name.	1914	1915	1916	1917	1918
Anchorage.....		\$974, 724	\$2, 609, 703	\$3, 800, 693	\$1, 433, 072
Bristol Bay.....	\$1, 227, 787	1, 455, 634	777, 199	1, 117, 674	3, 240, 622
Chignik.....	150, 294	185, 499	217, 280	262, 121	496, 570
Chitina.....	120, 273	95, 267	167, 862	184, 456	163, 856
Cordova.....	783, 834	963, 762	1, 922, 001	2, 727, 390	2, 108, 776
Katalla.....	24, 062	35, 740	55, 702	826, 527	65, 769
Kennecott.....	115, 729	166, 667	412, 088	754, 489	764, 581
Kodiak.....	126, 841	92, 438	103, 687	177, 306	223, 586
Kvichak.....			107, 724	666, 729	79, 684
Latouche.....	217, 958	223, 220	508, 543	578, 663	536, 430
Seward.....	315, 296	627, 257	855, 561	1, 258, 655	1, 361, 808
Valdez.....	670, 710	434, 965	538, 771	666, 642	384, 020
All other places.....	3, 067, 008	3, 465, 181	3, 631, 329	5, 906, 969	6, 524, 448
Total.....	6, 018, 269	8, 710, 344	11, 935, 320	19, 234, 642	17, 385, 299

Value of merchandise shipped from United States to fourth division.

Alatna.....	\$3, 796	Anvik.....	\$5, 786
Beaver.....	2, 960	Bettles.....	37, 490
Circle.....	28, 605	Dikeman.....	6, 481
Eagle.....	33, 172	Fairbanks.....	567, 187
Flat.....	18, 667	Fort Yukon.....	41, 677
Holy Cross.....	28, 754	Hot Springs.....	22, 503
Iditarod.....	127, 140	Kaltag.....	2, 825
Koyukuk.....	6, 326	Louden.....	8, 218
McGrath.....	16, 497	Napamute.....	13, 961
Nenana.....	520, 012	Nulato.....	11, 212
Ophir.....	5, 976	Rampart.....	17, 858
Ruby.....	73, 912	Russian Mission.....	7, 773
Stevens Village.....	20, 801	Tacotna.....	60, 889
Tanana.....	123, 378		
Tolovana.....	30, 326	Total.....	1, 839, 172

Comparative statement of principal places in fourth division.

Name.	1914	1915	1916	1917	1918
Chena.....	\$14, 984	\$4, 817	\$18, 110	\$4, 370	.....
Eagle.....	65, 142	66, 667	43, 971	66, 491	833, 172
Fairbanks.....	1, 304, 556	1, 103, 802	1, 544, 133	1, 524, 513	567, 187
Hot Springs.....	158, 308	128, 064	153, 116	131, 731	22, 603
Iditarod.....	323, 343	219, 047	371, 784	379, 828	127, 140
Nenana.....			235, 313	1, 077, 284	520, 012
Ruby.....	169, 262	209, 776	370, 469	330, 612	73, 912
Tanana.....	199, 716	171, 806	220, 112	218, 117	123, 378
All other places.....	367, 812	302, 669	576, 198	828, 579	371, 868
Total.....	2, 603, 123	2, 176, 668	3, 533, 206	4, 561, 525	1, 839, 172

Statement of number and tonnage of vessels entered and cleared for the years 1916, 1917, and 1918.

DOMESTIC TRADE.

Port.	1916				1917				1918			
	Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.	
	Num-ber.	Ton-nage.	Num-ber.	Ton-nage.	Num-ber.	Ton-nage.	Num-ber.	Ton-nage.	Num-ber.	Ton-nage.	Num-ber.	Ton-nage.
Ketchikan.....	927	448, 609	1, 120	423, 722	989	479, 774	1, 201	448, 766	1, 176	419, 600	1, 261	366, 348
Wrangell.....	8	2, 207	10	2, 190	13	1, 778	15	959	8	1, 411	2	1, 992
Juneau.....	31	29, 590	36	26, 643	46	22, 160	47	21, 339	55	15, 682	76	21, 726
Skagway.....	4	2, 737	12	6, 200	5	6, 084	2	1, 430	2	2, 436	.....	.....
St. Michael.....	6	10, 858	4	6, 436	7	12, 958	6	10, 449	3	4, 999	.....	2, 127
Nome.....	19	39, 447	16	30, 811	22	35, 718	13	20, 970	11	18, 830	9	13, 436
Unalaska.....	11	7, 203	21	11, 614	17	9, 197	17	9, 578	13	7, 940	13	5, 616
Cordova.....	28	43, 962	46	77, 625	27	48, 970	61	107, 883	37	60, 686	61	97, 902
Sulzer.....	17	12, 174	25	23, 523	25	20, 864	20	17, 399	12	10, 204	15	9, 731
Petersburg.....									14	191	11	151
Total.....	1, 061	566, 817	1, 290	608, 778	1, 151	637, 503	1, 322	638, 718	1, 321	542, 099	1, 441	648, 029

Statement of number and tonnage of vessels entered and cleared for the years 1916, 1917, and 1918.

FOREIGN TRADE.

Port.	1916				1917				1918			
	Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.	
	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.
Ketchikan.....	742	321,135	418	283,130	767	287,721	409	219,209	698	190,884	383	208,557
Wrangell.....	39	1,450	37	1,879	31	1,929	30	725	24	240	23	280
Juneau.....	4	2,614	4	1,118	9	3,517	1	1,406	1	1,679	2	2,436
Skagway.....	50	23,036	15	12,353	1	1,406	19	14,354	2	2,436	2	2,436
Eagle.....	50	23,036	48	19,979	51	20,859	51	20,368	36	15,183	33	14,675
St. Michael.....	13	5,536	1	448	15	4,552	13	2,730	1	1,481	1	1,481
Nome.....	3	1,881	10	1,614	3	1,058	13	2,730	18	3,525	14	741
Unalaska.....	3	1,723	2	1,450	2	1,450	1	329	4	2,425	1	408
Cordova.....	3	1,723	2	1,450	2	1,450	1	329	4	2,425	1	408
Sulzer.....	6	84	6	79	9	5,602	9	6,197	8	5,713	11	4,761
Total.....	866	357,509	539	320,800	888	278,094	532	264,002	793	222,610	465	229,370

Recapitulation of customs business, by ports, for the year ended Dec. 31, 1918.

Port.	Vessels entered.		Vessels cleared.		Entries taken.	Vessels documented.	Total vessels entered.	Total vessels cleared.
	Foreign.	Coast-wise.	Foreign.	Coast-wise.				
Cordova.....	1	37	.....	61	.....	3	38	61
Eagle.....	36	.....	33	.....	95	.....	36	33
Fortymile.....	.....	.....	.....	.....	12	.....	.....	.....
Juneau.....	1	55	.....	76	67	225	56	76
Ketchikan.....	698	1,170	383	1,261	148	236	1,574	1,634
Nome.....	18	11	14	9	28	65	29	23
Petersburg.....	.....	14	.....	11	.....	1	14	11
St. Michael.....	1	3	.....	2	.....	.....	4	2
Skagway.....	2	2	.....	.....	650	.....	4	.....
Sulzer.....	8	12	11	15	3	16	20	26
Unalaska.....	4	13	1	13	4	5	17	14
Wrangell.....	24	8	23	8	161	59	32	26
Total.....	793	1,331	465	1,441	1,168	610	2,124	1,906

Comparative statement of customs business for the district, 1907-1918.

Years.	Vessels entered.		Vessels cleared.		Entries taken.	Vessels documented.	Total vessels entered.	Total vessels cleared.
	Foreign.	Coast-wise.	Foreign.	Coast-wise.				
1907.....	341	445	303	426	1,636	373	796	729
1908.....	280	410	197	406	1,113	152	690	603
1909.....	318	418	262	414	1,104	176	736	676
1910.....	393	451	365	419	1,190	190	844	785
1911.....	367	514	331	495	1,200	276	681	828
1912.....	318	770	282	643	1,292	349	1,068	925
1913.....	365	812	327	770	1,318	580	1,177	1,090
1914.....	378	805	349	810	1,089	576	1,183	1,189
1915.....	602	792	585	817	1,129	587	1,394	1,402
1916.....	866	1,051	539	1,290	1,660	581	1,017	1,229
1917.....	888	1,151	532	1,393	1,899	643	2,039	1,914
1918.....	793	1,331	465	1,441	1,168	610	2,124	1,906

APPENDIX D.

Newspapers in Alaska.

Anchorage: Anchorage Times (daily and weekly). Anchorage Railroad Record (weekly).	Kodiak: Orphanage News Letter (monthly).
Chitina: The Chitina Leader (weekly).	Nenana: The Nenana News (daily).
Cordova: The Alaska Times (daily).	Nome: The Nome Nugget (triweekly). Industrial Worker (triweekly).
Douglas: The Douglas Island News (weekly).	Petersburg: The Report (weekly).
Fairbanks: The Alaska Citizen (daily and weekly). The Churchman (quarterly). The Fairbanks News-Miner (daily).	Seward: The Seward Gateway (daily).
Juneau: The Alaska Daily Empire. The Dispatch (weekly).	Skagway: Daily Alaskan.
Ketchikan: The Ketchikan Times (daily). The Ketchikan Chronicle (daily).	Sitka: The Verstovian (monthly).
	Unalakleet: Northern Light (monthly).
	Valdez: Valdez Miner (weekly).
	Wrangell: The Wrangell Sentinel (weekly).

APPENDIX E.

Incorporated Towns.

Names.	Date of incorporation.	Mayor.	Names.	Date of incorporation.	Mayor.
Cordova.....	1909	A. J. Adams.	Nome.....	1901	Edgar L. Holt.
Douglas.....	1902	Elmer E. Smith.	Petersburg.....	1910	Erick Ness.
Eagle.....	1901	Robert Murray.	Seward.....	1912	Harry V. Hoben.
Fairbanks.....	1903	A. L. Wilbur.	Skagway.....	1900	Howard Ashley.
Haines.....	1910	Chas. F. Berrersford.	Tanana.....	1912	Joseph Anich.
Iditarod.....	1911	Paul LaPlant.	Sitka.....	1913	James W. Johnston.
Juneau.....	1900	Latimer J. Gray.	Valdez.....	1901	Anthony J. Dimond.
Ketchikan.....	1900	A. A. Wakefield.	Wrangell.....	1902	J. W. Pritchett.

APPENDIX F.

Post Offices in Alaska.

[Eighth zone rate applies to all offices for parcel post.]

The figures 1, 2, 3, 4 indicate the judicial divisions in which the Territory is divided. The letters N (north), S (south), W (west), E (east), and C (center), indicate the relative position of each post office in the judicial divisions. R indicates mail restricted in winter months. All first class is delivered, but parcel post and other classes are delivered only in limited quantities. *Money-order offices. †Postal savings depositories. ‡International money-order offices.

Number.	Post office.	Location.	Number.	Post office.	Location.
05501	Afognak*	S. 3.	05684	Aniak, R.	S. 4.
05502	Akiak, R.	S. 4.	05504	Anvik, R.	S. 4.
05680	Akutana†	S. 3.	05505	Baranof.	S. 1.
05503	Amalga	N. 1.	05506	Barrow*, R.	N. 2.
05687	Anchorage†	E. 3.	05698	Bayview*	S. 1.
05680	Andreafsky, R.	S. 2.	05508	Berry, R.	E. 4.

Number.	Post office.	Location.	Number.	Post office.	Location.
05509	Bethel*, R.	S. 2.	05690	Livengood†, R.	C. 4.
05510	Bettles, R.	NE. 4.	05681	Long, R.	C. 4.
05682	Bluff, R.	C. 2.	05578	Loring.	S. 1.
05512	Candle*, R.	C. 2.	05665	McCarthy*	E. 3.
05667	Chatanika*, R.	E. 4.	05673	McGrath, R.	S. 4.
05515	Chatham.	S. 1.	05686	McKinley, R.	E. 3.
05641	Chichagof*.	N. 1.	05685	Matanuska*.	E. 3.
05514	Chickaloom.	E. 3.	05579	Meehan, R.	E. 4.
05517	Chicken, R.	E. 4.	05580	Metlakatla*.	S. 1.
05518	Chignik.	S. 3.	05581	Mill Seven.	E. 3.
05675	Chisana, R.	E. 3.	05582	Miller House, R.	E. 4.
05639	Chitina*.	E. 3.	05583	Moose Creek.	E. 3.
05519	Chomly.	S. 1.	05654	Naknek, R.	S. 3.
05520	Chrole†, R.	E. 4.	05585	Nation, R.	E. 4.
05521	Cleary, R.	E. 4.	05586	Nemana†, R.	E. 4.
05524	Copper Center*, R.	E. 3.	05587	Nizina, R.	E. 3.
05525	Cordova†.	E. 3.	05583	Nolan, R.	NE. 4.
05526	Council†, R.	C. 2.	05500	Nome†, R.	C. 2.
05661	Craig*.	S. 1.	05589	Nulato*, R.	C. 4.
05647	Dan Creek, R.	E. 3.	05590	Nushagak, R.	NW. 3.
05538	Deadwood*, R.	E. 4.	05591	Ophir*, R.	S. 4.
05529	Deering, R.	C. 2.	05592	Palmer.	E. 3.
05530	Dempsey, R.	E. 3.	05593	Petersburg†.	S. 1.
05645	Dillingham, R.	NW. 3.	05592	Poorman, R.	S. 4.
05531	Dolomi.	S. 1.	05700	Port Walter*.	W. 1.
05532	Dome, R.	E. 4.	05596	Quinhagak, R.	NW. 3.
05533	Douglas†.	N. 1.	05597	Rampart*, R.	C. 4.
05527	Doyhof.	S. 1.	05598	Richardson, R.	E. 4.
05534	Eaglet, R.	E. 4.	05651	Rubyt, R.	C. 4.
05536	Ellamar*.	E. 3.	05599	Saint Michael†, R.	S. 2.
05535	Eka.	E. 3.	05601	Salchaket*, R.	E. 4.
05690	Fairbanks†, R.	E. 4.	05602	Sanak.	S. 3.
05677	Flat*, R.	S. 4.	05603	Sand Point†.	S. 3.
05540	Fort Liscomb†.	E. 3.	05604	Sanitarium.	S. 1.
05693	Fortuna Ledge*, R.	S. 2.	05605	Seldovia*.	E. 3.
05541	Fort Yukon*, R.	E. 4.	05643	Seventy Mile, R.	E. 4.
05542	Fox, R.	E. 4.	05606	Seward††.	E. 3.
05543	Franklin*, R.	E. 4.	05607	Shakan*.	S. 1.
05544	Funter.	N. 1.	05609	Shungnak, R.	N. 2.
05546	Golovin, R.	C. 2.	05610	Sitka†.	S. 1.
05691	Granite Mine.	E. 3.	05611	Skagway†.	N. 1.
05547	Gulkana, R.	E. 3.	05612	Snettisham.	N. 1.
05548	Gypsum.	N. 1.	05613	Solomon*, R.	C. 2.
05549	Haines†.	N. 1.	05614	Steel Creek, R.	E. 4.
05669	Hawk Inlet.	N. 1.	05657	Strelna.	E. 3.
05695	Haycock, R.	C. 2.	05615	Sulzer†.	S. 1.
05573	Holy Cross†, R.	S. 4.	05616	Sumdum.	N. 1.
05550	Hollis.	S. 1.	05618	Susitna*, R.	E. 3.
05552	Hoonah*.	N. 1.	05642	Talkeetna, R.	E. 3.
05553	Hope*, R.	E. 3.	05653	Taku Harbor.	N. 1.
05554	Hot Springs*, R.	C. 4.	05619	Tanana*, R.	C. 4.
05662	Hydaburg*.	S. 1.	05620	Taylor, R.	C. 2.
05669	Hyder.	S. 1.	05650	Tefkel, R.	E. 3.
05640	Iditarod†, R.	S. 4.	05621	Teller*, R.	C. 2.
05556	Iliamna.	S. 3.	05622	Tenakee*.	N. 1.
05558	Jack Wade, R.	E. 4.	05678	Thanet†.	N. 1.
05569	Juneau†.	N. 1.	05643	Tigara, R.	N. 2.
05560	Kake*.	S. 1.	05623	Tofty*, R.	C. 4.
05561	Kaltag.	C. 4.	05624	Tokeen*.	S. 1.
05562	Kassan*.	S. 1.	05683	Tokotna, R.	S. 4.
05563	Katalla†.	E. 3.	05625	Tolovana, R.	C. 4.
05565	Kenai.	E. 3.	05627	Treadwell†.	N. 1.
05596	Kennecott†.	E. 3.	05628	Tyee.	S. 1.
05567	Ketchikan†.	S. 1.	05629	Unalakleet*, R.	S. 2.
05697	Kiana, R.	N. 2.	05630	Unalaska*.	S. 3.
05568	Killsnoo.	S. 1.	05631	Ungat.	S. 3.
05676	King Cove.	S. 3.	05632	Uyak*.	S. 3.
05569	Klawock*.	S. 1.	05633	Valdez†.	E. 3.
05570	Knik*, R.	E. 3.	05696	Wainwright, R.	N. 2.
05571	Kodiak*.	S. 3.	05624	Wales, R.	C. 2.
05572	Kokrine*, R.	C. 4.	05635	Wasilla*.	F. 3.
05575	Kotzebue*, R.	N. 2.	05636	Windham.	N. 1.
05648	Lake Bay.	S. 1.	05637	Wrangell†.	S. 1.
05577	Latouche.	E. 3.	05638	Yakutat*.	N. 1.

APPENDIX G.

Foreign Consuls in Alaska.

Name.	Residence.	District.
Norway:		
William Britt.....	Juneau.....	Southern part of Alaska.
Gubrand J. Lomen.....	Nome.....	Northern part of Alaska.
Russia:		
Nikolai Bogoyavlensky.....	do.....	All of Alaska.
Sweden:		
Eric William Carleton.....	do.....	Do.

APPENDIX H.

Laws Relating to Alaska Passed at the Third Session of the Sixty-fifth Congress and the First Session of the Sixty-sixth Congress.

[PUBLIC RESOLUTION NO. 49—65TH CONGRESS.]

[H. J. Res. 372.]

JOINT RESOLUTION To amend Senate joint resolution numbered seventy-eight, approved October fifth, nineteen hundred and seventeen, entitled "Joint resolution to suspend requirements of the annual assessment work on mining claims during the years nineteen hundred and seventeen and nineteen hundred and eighteen."

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of Senate joint resolution, approved October fifth, nineteen hundred and seventeen, be amended so as to provide that the time for filing notices to hold said mining claims in the Territory of Alaska, under the said resolution, be, and the same is hereby, extended to the first day of April, nineteen hundred and nineteen.

Approved, January 25, 1919.

[PUBLIC—No. 259—65TH CONGRESS.]

[S. 3220.]

AN ACT Authorizing the Secretary of the Interior to make investigations, through the Bureau of Mines, of lignite coals and peat, to determine the practicability of their utilization as a fuel and in producing commercial products.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior is hereby authorized and directed to make experiments and investigations, through the Bureau of Mines, of lignite coals and peat, to determine the commercial and economic practicability of their utilization in producing fuel oil, gasoline substitutes, ammonia, tar, solid fuels, gas for power and other purposes; and there is hereby appropriated, out of the funds in the Treasury not otherwise appropriated, the sum of \$100,000, or so much thereof as may be needed, to conduct such experiments and investigations, including personal services in the District of Columbia and elsewhere, and including supplies, equipment, expenses of traveling and subsistence, and for every other expense incident to this work.

SEC. 2. The Secretary of the Interior is authorized and directed to sell or otherwise dispose of any property, plant, or machinery purchased or acquired under the provisions of this act, as soon as the experiments and investigations hereby authorized have been concluded, and report the results of such experiments and investigations to Congress.

Approved, February 25, 1919.

[PUBLIC—No. 273—65TH CONGRESS.]

[H. R. 13353.]

AN ACT To extend the provisions of the homestead laws touching credit for period of enlistment to the soldiers, nurses, and officers of the Army and the seamen, marines, nurses, and officers of the Navy and the Marine Corps of the United States who have served or will have served with the Mexican border operations or during the war between the United States and Germany and her allies.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subject to the conditions therein expressed, as to length of service and honorable discharge, the provisions of sections twenty-three hundred and four and twenty-three hundred and five, Revised Statutes of the United States, shall be applicable in all cases of military and naval service rendered in connection with the Mexican border operations or during the war with Germany and its allies as defined by public resolution numbered thirty-two, approved August twenty-ninth, nineteen hundred and sixteen (Thirty-ninth Statutes at Large, page six hundred and seventy-one), and the act approved July twenty-eighth, nineteen hundred and seventeen (Fortieth Statutes at Large, page two hundred and forty-eight).

Approved, February 25, 1919.

[PUBLIC—No. 279—65TH CONGRESS.]

[S. 5038.]

AN ACT Extending the use of the special fund for vocational education provided by section seven of the vocational rehabilitation act, approved June twenty-seventh, nineteen hundred and eighteen, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the special fund for vocational education, authorized by section seven of the vocational rehabilitation act, approved June twenty-seventh, nineteen hundred and eighteen, together with the items of appropriation made by said act, are hereby made available, in addition to the purposes therein prescribed, for such other expenses as in the discretion of the board is deemed necessary and proper for the payment of necessary travel, lodging, subsistence, and other expenses of disabled men while under investigation by the board to determine their eligibility for training under the act, and the purchase of supplies, equipment, and clothing for disabled men when ready to enter employment, and the traveling expenses of such men to place of employment, and for supplementing any or all of the other items of appropriation made by said act.

Approved, February 26, 1919.

[PUBLIC—No. 281—65TH CONGRESS.]

[S. 68.]

AN ACT To amend section two hundred and sixty-nine of the act of March third, nineteen hundred and eleven, entitled "An act to codify, revise, and amend the laws relating to the judiciary."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section two hundred and sixty-nine of the act approved March third, nineteen hundred and eleven, entitled "An act to codify, revise, and amend the laws relating to the judiciary," be, and the same is hereby, amended so as to read as follows:

"SEC. 269. All of the said courts shall have power to grant new trials, in cases where there has been a trial by jury, for reasons for which new trials have usually been granted in the courts of law. On the hearing of any appeal, certiorari, writ of error, or motion for a new trial, in any case, civil or criminal, the court shall give judgment after an examination of the entire record before the court, without regard to technical errors, defects, or exceptions which do not affect the substantial rights of the parties."

Approved, February 26, 1919.

[PUBLIC—No. 300—65TH CONGRESS.]

[H. R. 13366.]

AN ACT Permitting any person who has served in the United States Army, Navy, or Marine Corps in the present war to retain his uniform and personal equipment, and to wear the same under certain conditions.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any person who served in the United States Army, Navy, or Marine Corps in the present war may, upon honorable discharge and return to civil life, permanently retain one complete suit of outer uniform clothing, including the overcoat, and such articles of personal apparel and equipment as may be authorized, respectively, by the Secretary of War or the Secretary of the Navy, and may wear such uniform clothing after such discharge: *Provided*, That the uniform above referred to shall include some distinctive mark or insignia to be prescribed, respectively, by the Secretary of War or the Secretary of the Navy, such mark or insignia to be issued, respectively, by the War Department or Navy Department to all enlisted personnel so discharged. The word "Navy" shall include the officers and enlisted personnel of the Coast Guard who have served with the Navy during the present war.

SEC. 2. That the provisions of this act shall apply to all persons who served in the United States Army, Navy, or Marine Corps during the present war honorably discharged since April sixth, nineteen hundred and seventeen. And in cases where such clothing and uniforms have been restored to the Government on their discharge the same or similar clothing and uniform in kind and value as near as may be shall be returned and given to such soldiers, sailors, and marines.

SEC. 3. That section one hundred and twenty-six of the act entitled "An act for making further and more effectual provision for the national defense, and for other purposes," approved June third, nineteen hundred and sixteen, be amended to read as follows:

"SEC. 126. That an enlisted man honorably discharged from the Army, Navy, or Marine Corps since November eleventh, nineteen hundred and eighteen, or who may hereafter be honorably discharged, shall receive five cents per mile from the place of his discharge to his actual bona fide home or residence, or original muster into the service, at his option: *Provided*, That for sea travel on discharge, transportation and subsistence only shall be furnished to enlisted men: *Provided*, That naval reservists duly enrolled who have been honorably released from active service since November eleventh, nineteen hundred and eighteen, or who may hereafter be honorably released from active service, shall be entitled likewise to receive mileage as aforesaid."

SEC. 4. That all acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

Approved, February 28, 1919.

[PUBLIC RESOLUTION—No. 55—65TH CONGRESS.]

[S. J. Res. 198.]

JOINT RESOLUTION To suspend the legal requirements of assessment work on mining claims in Alaska for the years nineteen hundred and seventeen, nineteen hundred and eighteen, and nineteen hundred and nineteen, and extending to that Territory the provisions of public resolution numbered ten, Sixty-fifth Congress, approved July seventeenth, nineteen hundred and seventeen, and public resolution numbered twelve, Sixty-fifth Congress, approved October fifth, nineteen hundred and seventeen, as amended, and for other purposes.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of public resolution numbered ten, Sixty-fifth Congress, approved July seventeenth, nineteen hundred and seventeen, and the provisions of public resolution numbered twelve, Sixty-fifth Congress, approved October fifth, nineteen hundred and seventeen, and amendments thereto, be, and they are hereby, extended to the Territory of Alaska. The laws requiring assessment work to be made upon mining claims in the Territory of Alaska for the years nineteen hundred and seventeen, nineteen hundred and eighteen, and nineteen hundred and nineteen, are hereby suspended for such period; and no forfeiture or relocation of any mining claim or mining location in said Territory shall be permitted or adjudged for failure to do or have done the annual assessment work thereon for either of said years; and no mining claim or location therein shall be held to be forfeited or subject to relocation for any failure to have done the annual assessment work thereon where the owner or anyone for him complied with the provisions of public resolution numbered ten, Sixty-fifth Congress, approved July seventeenth, nineteen hundred and seventeen, or public resolution numbered twelve, Sixty-fifth Congress, approved October fifth, nineteen hundred and seventeen, and amendments thereto.

Approved, February 28, 1919.

[PUBLIC—No. 322—65TH CONGRESS.]

[H. R. 1374.]

AN ACT To provide relief in cases of contracts connected with the prosecution of the war, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, authorized to adjust, pay, or discharge any agreement, express or implied, upon a fair and equitable basis that has been entered into, in good faith during the present emergency and prior to November twelfth, nineteen hundred and eighteen, by any officer or agent acting under his authority, direction, or instruction, or that of the President, with any person, firm, or corporation for the acquisition of lands, or the use thereof, or for damages resulting from notice by the Government of its intention to acquire or use said lands, or for the production, manufacture, sale, acquisition or control of equipment, materials, or supplies, or for services, or for facilities, or other purposes connected with the prosecution of the war, when such agreement has been performed in whole or in part, or expenditures have been made or obligations incurred upon the faith of the same by any such person, firm, or corporation prior to November twelfth, nineteen hundred and eighteen, and such agreement has not been executed in the manner prescribed by law: *Provided*, That in no case shall any award either by the Secretary of War, or the Court of Claims include prospective or possible profits on any part of the contract beyond the goods and supplies delivered to and accepted by the United States and a reasonable remuneration for expenditures and obligations or liabilities necessarily incurred in performing or preparing to perform said contract or order: *Provided further*, That this act shall not authorize payment to be made of any claim not presented before June thirtieth, nineteen hundred and nineteen: *And provided further*, That the Secretary of War shall report to Congress at the beginning of its next session following June thirtieth, nineteen hundred and nineteen, a detailed statement showing the nature, terms, and conditions of every such agreement and the payment or adjustment thereof: *And provided further*, That no settlement of any claim arising under any such agreement shall bar the United States Government through any of its duly authorized agencies or any committee of Congress hereafter duly appointed, from the right of review of such settlement, nor the right of recovery of any money paid by the Government to any party under any settlement entered into, or payment made under the provisions of this act, if the Government has been defrauded, and the right of recovery in all such cases shall exist against the executors, administrators, heirs, successors, and assigns, of any party or parties: *And provided further*, That nothing in this act shall be construed to relieve any officer or agent of the United States from criminal prosecution under the provisions of any statute of the United States for any fraud or criminal conduct: *And provided further*, That this act shall in no way relieve or excuse any officer or his agent from such criminal prosecution because of any irregularity or illegality in the manner of the execution of such agreement: *And provided further*, That in all proceedings hereunder witnesses may be compelled to attend, appear, and testify, and produce books, papers, and letters, or other documents; and the claim that any such testimony or evidence may tend to criminate the person giving the same shall not excuse such witness from testifying but such evidence or testimony shall not be used against such person in the trial of any criminal proceeding.

SEC. 2. That the Court of Claims is hereby given jurisdiction on petition of any individual, firm, company, or corporation referred to in section 1 hereof, to find and award fair and just compensation in the cases specified in said section in the event that such individual, firm, company, or corporation shall not be willing to accept the adjustment, payment, or compensation offered by the Secretary of War as hereinbefore provided, or in the event that the Secretary of War shall fail or refuse to offer a satisfactory adjustment, payment, or compensation as provided for in said section.

SEC. 3. That the Secretary of War, through such agency as he may designate or establish, is empowered, upon such terms as he or it may determine to be in the interest of the United States, to make equitable and fair adjustments and agreements, upon the termination or in settlement or readjustment of agreements or arrangements entered into with any foreign Government or Governments or nationals thereof, prior to November twelfth, nineteen hundred and eighteen, for the furnishing to the American Expeditionary Forces or otherwise for war purposes of supplies, materials, facilities, services, or the use of property, or for the furnishing of any thereof by the United States to any foreign Government or Governments, whether or not such agreements or arrangements have been entered into in accordance with applicable statutory

provisions; and the other provisions of this act shall not be applicable to such adjustments.

SEC. 4. That whenever, under the provisions of this act, the Secretary of War shall make an award to any prime contractor with respect to any portion of his contract which he shall have sublet to any other person, firm, or corporation who has in good faith made expenditures, incurred obligations, rendered service, or furnished material, equipment, or supplies to such prime contractor, with the knowledge and approval of any agent of the Secretary of War duly authorized thereunto, before payment of said award the Secretary of War shall require such prime contractor to present satisfactory evidence of having paid said subcontractor or of the consent of said subcontractor to look for his compensation to said prime contractor only; and in the case of the failure of said prime contractor to present such evidence or such consent, the Secretary of War shall pay directly to said subcontractor the amount found to be due under said award; and in case of the insolvency of any prime contractor the subcontractor of said prime contractor shall have a lien upon the funds arising from said award prior and superior to the lien of any general creditor of said prime contractor.

SEC. 5. That the Secretary of the Interior be, and he hereby is, authorized to adjust, liquidate, and pay such net losses as have been suffered by any person, firm, or corporation, by reason of producing or preparing to produce, either manganese, chrome, pyrites, or tungsten in compliance with the request or demand of the Department of the Interior, the War Industries Board, the War Trade Board, the Shipping Board, or the Emergency Fleet Corporation to supply the urgent needs of the Nation in the prosecution of the war; said minerals being enumerated in the act of Congress approved October fifth, nineteen hundred and eighteen, entitled "An act to provide further for the national security and defense by encouraging the production, conserving the supply, and controlling the distribution of those ores, metals, and minerals which have formerly been largely imported, or of which there is or may be an inadequate supply."

The said Secretary shall make such adjustments and payments in each case as he shall determine to be just and equitable; that the decision of said Secretary shall be conclusive and final, subject to the limitation hereinafter provided; that all payments and expenses incurred by said Secretary, including personal services, traveling and subsistence expenses, supplies, postage, printing, and all other expenses incident to the proper prosecution of this work, both in the District of Columbia and elsewhere, as the Secretary of the Interior may deem essential and proper, shall be paid from the funds appropriated by the said act of October fifth, nineteen hundred and eighteen, and that said funds and appropriations shall continue to be available for said purpose until such time as the said Secretary shall have fully exercised the authority herein granted and performed and completed the duties hereby provided and imposed: *Provided, however*, That the payments and disbursements made under the provisions of this section for and in connection with the payments and settlements of the claims herein described, and the said expenses of administration shall in no event exceed the sum of \$8,500,000: *And provided further*, That said Secretary shall consider, approve, and dispose of only such claims as shall be made hereunder and filed with the Department of the Interior within three months from and after the approval of this act: *And provided further*, That no claim shall be allowed or paid by said Secretary unless it shall appear to the satisfaction of the said Secretary that the expenditures so made or obligations so incurred by the claimant were made in good faith for or upon property which contained either manganese, chrome, pyrites, or tungsten in sufficient quantities to be of commercial importance: *And provided further*, That no claims shall be paid unless it shall appear to the satisfaction of said Secretary that moneys were invested or obligations were incurred subsequent to April sixth, nineteen hundred and seventeen, and prior to November twelfth, nineteen hundred and eighteen, in a legitimate attempt to produce either manganese, chrome, pyrites, or tungsten for the needs of the Nation for the prosecution of the war, and that no profits of any kind shall be included in the allowance of any of said claims, and that no investment for merely speculative purposes shall be recognized in any manner by said Secretary: *And provided further*, That the settlement of any claim arising under the provisions of this section shall not bar the United States Government, through any of its duly authorized agencies, or any committee of Congress hereafter duly appointed, from the right of review of such settlement, nor the right to recover any money paid by the Government to any party under and by virtue of the provisions of this section, if the Government has been defrauded, and the right of recovery in all such cases shall extend to the executors, administrators, heirs, and assigns of any party.

That a report of all operations under this section, including receipts and disbursements, shall be made to Congress on or before the first Monday in December of each year.

That nothing in this section shall be construed to confer jurisdiction upon any court to entertain a suit against the United States: *Provided further*, That in determining the net losses of any claimant the Secretary of the Interior shall, among other things, take into consideration and charge to the claimant, the then market value of any ores or minerals on hand belonging to the claimant, and also the salvage or usable value of any machinery or other appliances which may be claimed was purchased to equip said mine for the purpose of complying with the request or demand of the agencies of the Government above mentioned in the manner aforesaid.

Approved, March 2, 1919.

[PUBLIC—No. 5—66TH CONGRESS.]

Excerpt from "An act making appropriations to supply deficiencies in appropriations for the fiscal year ending June 30, 1919, and prior fiscal years, and for other purposes," approved July 11, 1919.

SEC. 5. That the heads of the several executive departments and other responsible officials, in expending appropriations contained in this or any other act, so far as possible shall purchase material, supplies, and equipment, when needed and funds are available, from other services of the Government possessing material, supplies, and equipment no longer required because of the cessation of war activities. It shall be the duty of the heads of the several executive departments and other officials, before purchasing any of the articles described herein, to ascertain from the other services of the Government whether they have articles of the character described that are serviceable. And articles purchased by one service from another, if the same have not been used, shall be paid for at a reasonable price not to exceed actual cost, and if the same have been used, at a reasonable price based upon length of usage. The various services of the Government are authorized to sell such articles under the conditions specified, and the proceeds of such sales shall be covered into the Treasury as a miscellaneous receipt: *Provided*, That this section shall not be construed to amend, alter, or repeal the Executive order of December 3, 1918, concerning the transfer of office material, supplies, and equipment in the District of Columbia falling into disuse because of the cessation of war activities.

SEC. 6. That hereafter no part of the money appropriated by this or any other act shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, to favor or oppose, by vote or otherwise, any legislation or appropriation by Congress, whether before or after the introduction of any bill or resolution proposing such legislation or appropriation; but this shall not prevent officers and employees of the United States from communicating to Members of Congress on the request of any Member or to Congress, through the proper official channels, requests for legislation or appropriations which they deem necessary for efficient conduct of the public business.

Any officer or employee of the United States who, after notice and hearing by the superior officer vested with the power of removing him, is found to have violated or attempted to violate this section, shall be removed by such superior officer from office or employment. Any officer or employee of the United States who violates or attempts to violate this section shall also be guilty of a misdemeanor and on conviction thereof shall be punished by a fine of not more than \$500 or by imprisonment for not more than one year, or both.

[PUBLIC—No. 9—66TH CONGRESS.]

[S. 120.]

AN ACT To repeal the joint resolution entitled "Joint resolution to authorize the President in time of war to supervise or take possession and assume control of any telegraph, telephone, marine cable, or radio system or systems or any part thereof, and to operate the same in such manner as may be needful or desirable for the duration of the war and to provide just compensation therefor," approved July 18, 1918, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That chapter 154 of the acts of the second session of the Sixty-fifth Congress, being the joint resolution entitled "Joint resolution to authorize the President in time of war to supervise or take possession and assume control of any telegraph, telephone, marine cable, or radio system or systems, or any part thereof and to operate the same in such manner as may be needful or desirable for the duration of the war and to provide just compensation therefor," approved on the 16th day of July, 1918, be, and the same is hereby, repealed to take effect at midnight on the

last day of the calendar month in which this act is approved: *Provided, however*, That the existing toll and exchange telephone rates as established or approved by the Postmaster General on or prior to June 6, 1919, shall continue in force for a period not to exceed four months after this act takes effect, unless sooner modified or changed by the public authorities—State, municipal, or otherwise—having control or jurisdiction of tolls, charges, and rates or by contract or by voluntary reduction.

Sec. 2. That the President be, and he is hereby, authorized and directed, at midnight on the last day of the calendar month in which this act is approved, to return and deliver to the respective owners thereof all of the systems, lines, and property taken possession of or received, operated, supervised, or controlled by him under authority of said joint resolution.

Sec. 3. That the first proviso of said joint resolution prescribing the just compensation to be paid for and on account of said supervision, possession, control or operation therein specified shall continue in full force and effect until such just compensation shall be fully adjusted and paid in the manner and according to the terms and conditions therein set forth.

Sec. 4. That within ninety days after this act shall take effect the President shall cause to be made to the Congress a detailed account and report of all his acts and proceedings in connection with the supervision, possession, control, and operation of the telephone, telegraph, and marine cable systems of the United States, and of all moneys received and expended, and all property and assets acquired or held, and all liabilities or obligations incurred, including contracts relative to compensation awards, such report to show in detail the financial results of the operation of each separate wire system from August 1, 1918, up to the date when the said systems shall have been returned.

Approved, July 11, 1919.

[PUBLIC—No. 11—66TH CONGRESS.]

[S. 1213.]

AN ACT To amend an act entitled "An act to provide for vocational rehabilitation and return to civil employment of disabled persons discharged from the military or naval forces of the United States, and for other purposes," approved June 27, 1918.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 2 of the act entitled "An act to provide for vocational rehabilitation and return to civil employment of disabled persons discharged from the military or naval forces of the United States, and for other purposes," approved June 27, 1918, be hereby amended to read as follows:

"Sec. 2. That every person enlisted, enrolled, drafted, inducted, or appointed in the military or naval forces of the United States, including members of training camps authorized by law, who, since April 7, 1917, has resigned or has been discharged or furloughed therefrom under honorable conditions, having a disability incurred, increased, or aggravated while a member of such forces, or later developing a disability traceable in the opinion of the board to service with such forces, and who, in the opinion of the Federal Board for Vocational Education, is in need of vocational rehabilitation to overcome the handicap of such disability, shall be furnished by the said board, where vocational rehabilitation is feasible, such course of vocational rehabilitation as the board shall prescribe and provide.

"The board shall have the power, and it shall be its duty, to furnish the persons included in this section suitable courses of vocational rehabilitation, to be prescribed and provided by the board; and every person electing to follow such a course of vocational rehabilitation shall, while following the same, be paid monthly by the said board from the appropriation hereinafter provided such sum as in the judgment of the said board is necessary for his maintenance and support and for the maintenance and support of persons depending upon him, if any: *Provided, however*, That in no event shall the sum so paid such person while pursuing such course be more than \$80 per month for a single man without dependents, or for a man with dependents \$100 per month plus the several sums prescribed as family allowances under section 204 of Article II of the War Risk Insurance Act.

"No compensation under Article III of the act entitled 'An act to amend an act entitled "An act to authorize the establishment of a Bureau of War Risk Insurance in the Treasury Department," approved October 6, 1917, shall be paid for the period during which any such person is being furnished by said board a course of vocational rehabilitation and support as herein authorized: *Provided, however*, That in the event any person pursuing a course of vocational rehabilitation is entitled under said Article III to compensation in an amount in excess of the payments made to him by the said

board for his support and the support of his dependents, if any, the Bureau of War Risk Insurance shall pay monthly to such person such additional amount as may be necessary to equal the total compensation due under said Article III of said act.

"There is hereby appropriated, out of any money in the Treasury of the United States not otherwise appropriated, available immediately and until expended, the sum of \$6,000,000, or so much thereof as may be necessary, to be used by the Federal Board for Vocational Education for the purpose of making the payments prescribed by this section and for defraying the administrative expenses incident thereto."

Approved, July 11, 1919.

[PUBLIC NO. 21—66TH CONGRESS.]

Excerpts from "An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1920, and for other purposes," approved July 19, 1919.

TERRITORY OF ALASKA.

Alaskan Engineering Commission: For carrying out the provisions of the act approved March 12, 1914, entitled "An act to authorize the President of the United States to locate, construct, and operate railroads in the Territory of Alaska, and for other purposes," including expenses incident to conducting hearings and examining estimates for appropriations in Alaska, to continue available until expended, \$2,088,029.

Authority is granted to purchase during the fiscal year 1920, from the appropriation made for the construction and operation of railroads in Alaska, articles and supplies for sale to employees and contractors, the appropriation to be reimbursed by the proceeds of such sales.

During the fiscal year 1920 there shall be covered into the appropriation established from time to time under the act approved March 12, 1914, entitled "An act to authorize the President of the United States to locate, construct, and operate railroads in the Territory of Alaska, and for other purposes," the proceeds of the sale of material utilized for temporary work and structures in connection with the operations under said act, as well as the sales of all other condemned property which has been purchased or constructed under the provisions thereof, also any moneys refunded in connection with the construction and operations under said act, and a report hereunder shall be made to Congress at the beginning of its next session.

Insane of Alaska: For care and custody of persons legally adjudged insane in Alaska, including transportation and other expenses, \$111,480: *Provided*, That authority is granted to the Secretary of the Interior to pay from this appropriation to the Sanitarium Company of Portland, Oregon, not to exceed \$495 per capita per annum for the care and maintenance of Alaskan insane patients during the fiscal year 1920.

Education in Alaska: To enable the Secretary of the Interior, in his discretion and under his direction, to provide for the education and support of the Eskimos, Aleuts, Indians, and other natives of Alaska; erection, repair, and rental of school buildings; textbooks and industrial apparatus; pay and necessary traveling expenses of superintendents, teachers, physicians, and other employees, and all other necessary miscellaneous expenses which are not included under the above special heads, \$250,000: *Provided*, That no person employed hereunder as special agent or inspector, or to perform any special or unusual duty in connection herewith, shall receive as compensation exceeding \$200 per month, in addition to actual traveling expenses and per diem not exceeding \$4 in lieu of subsistence, when absent on duty from his designated and actual post of duty: *Provided further*, That of said sum not exceeding \$7,000 may be expended for personal services in the District of Columbia.

All expenditures of money appropriated herein for school purposes in Alaska for schools other than those for the education of white children under the jurisdiction of the governor thereof shall be under the supervision and direction of the Commissioner of Education and in conformity with such conditions, rules, and regulations as to conduct and methods of instruction and expenditure of money as may from time to time be recommended by him and approved by the Secretary of the Interior.

Medical relief in Alaska: To enable the Secretary of the Interior in his discretion and under his direction, with the advice and cooperation of the Public Health Service, to provide for the medical and sanitary relief of the Eskimos, Aleuts, Indians, and other natives of Alaska; erection, purchase, repair, rental, and equipment of hospital buildings; books and surgical apparatus; pay and necessary traveling expenses of physicians, nurses, and other employees, and all other necessary miscellaneous expenses which are not included under the above special heads, \$80,000.

Patients who are not indigent may be admitted to the hospitals for care and treatment on the payment of such reasonable charges therefor as the Secretary of the Interior shall prescribe.

Reindeer for Alaska: For support of reindeer stations in Alaska and instruction of Alaskan natives in the care and management of reindeer, \$7,500: *Provided*, That the Commissioner of Education is authorized to sell such of the male reindeer belonging to the Government as he may deem advisable and to use the proceeds in the purchase of female reindeer belonging to missions and in the distribution of reindeer to natives in those portions of Alaska in which reindeer have not yet been placed and which are adapted to the reindeer industry.

Protection of game in Alaska: For carrying out the act approved May 11, 1908, entitled "An act for the protection of game in Alaska, and for other purposes," including salaries, traveling expenses of game wardens, and all other necessary expenses, \$20,000, to be expended under the direction of the governor of Alaska.

Traffic in intoxicating liquors: For suppression of the traffic in intoxicating liquors among the natives of Alaska, to be expended under the direction of the Secretary of the Interior, \$15,000.

* * * * *

SEC. 3. That the heads of the several executive departments and other responsible officials, in expending appropriations contained in this act, so far as possible shall purchase material, supplies, and equipment, when needed and funds are available, from other services of the Government possessing material, supplies, and equipment no longer required because of the cessation of war activities. It shall be the duty of the heads of the several executive departments and other officials, before purchasing any of the articles described herein, to ascertain from the other services of the Government whether they have articles of the character described that are serviceable. And articles purchased by one service from another, if the same have not been used, shall be paid for at a reasonable price not to exceed actual cost, and if the same have been used, at a reasonable price based upon length of usage. The various services of the Government are authorized to sell such articles under the conditions specified, and the proceeds of such sales shall be covered into the Treasury as a miscellaneous receipt: *Provided*, That this section shall not be construed to amend, alter, or repeal the Executive order of December 3, 1918, concerning the transfer of office material, supplies, and equipment in the District of Columbia falling into disuse because of the cessation of war activities: *Provided further*, That any officer of the Government having machinery, material, equipment or supplies for printing, binding, and blank book work, including lithography, photolithography, and other processes of reproduction, which are no longer required or authorized for his service, shall submit a detailed report of the same to the Public Printer, and the Public Printer is hereby authorized, with the approval of the Joint Committee on Printing, to requisition such articles of the character herein described as are serviceable in the Government Printing Office, and the same shall be promptly delivered to that office.

SEC. 4. That except as otherwise provided by law the President is authorized to transfer to the custody and care of such of the departments or independent establishments as he may determine the files and records of the agencies created for the period of the war upon the discontinuance of such activities.

SEC. 5. The Secretary of War is authorized to transfer any unused and surplus motor-propelled vehicles and motor equipment of any kind, the payment for same to be made as provided herein, to any branch of the Government service having appropriations available for the purchase of said vehicles and equipment: *Provided*, That in case of the transfers herein authorized a reasonable price not to exceed actual cost, and if the same have been used, at a reasonable price based upon length of usage, shall be determined upon and an equivalent amount of each appropriation available for said purchase shall be covered into the Treasury as a miscellaneous receipt, and the appropriation in each case reduced accordingly: *Provided further*, That it shall be the duty of each official of the Government having such purchases in charge to procure the same from any such unused or surplus stock if possible: *Provided further*, That hereafter no transfer of motor-propelled vehicles and motor equipment, unless specifically authorized by law, shall be made free of charge to any branch of the Government service.

[PUBLIC RESOLUTION—No. 10—66TH CONGRESS.]

[H. J. Res. 150.]

JOINT RESOLUTION To suspend the requirements of annual assessment work on certain mining claims during the year 1919.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the provision of section 2324 of the Revised Statutes of the United States which requires on each mining claim located, and until a patent has been issued therefor, not less than \$100 worth of labor to be performed or improvements aggregating such amount to be made during each year, be, and the same is hereby, suspended during the calendar year 1919: *Provided*, That no such suspension shall be granted to any one claimant for more than five claims: *Provided*, That every claimant of any such mining claim in order to obtain the benefits of this resolution shall file or cause to be filed in the office where the location notice or certificate is recorded, on or before December 31, 1919, a notice of his desire to hold said mining claim under this resolution.

SEC. 2. That this resolution shall not be construed to alter, modify, amend, or repeal the public resolution entitled "Joint resolution to relieve the owners of mining claims who have been mustered into the military or naval service of the United States as officers or enlisted men from performing assessment work during the term of such service," approved July 17, 1917.

Approved, August 15, 1919.

[PUBLIC—No. 40—66TH CONGRESS.]

[H. R. 3854.]

AN ACT For the repeal of the daylight-saving law.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 3 of the act entitled "An act to save daylight and to provide standard time for the United States," approved March 19, 1918, is hereby repealed, effective on the last Sunday of October, 1919, after the approval of this act, when by the retarding of one hour the standard time of each zone shall be returned to and thereafter be the mean astronomical time of the degree of longitude governing each zone as defined in section 1 of said act approved March 19, 1918.

F. H. GILLETT,

Speaker of the House of Representatives.

THOS. R. MARSHALL,

Vice President of the United States and

President of the Senate.

IN THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES,

August 19, 1919.

The President of the United States having returned to the House of Representatives in which it originated, the bill (H. R. 3854) "For the repeal of the daylight-saving law," with his objections thereto, the House proceeded in pursuance of the Constitution to reconsider the same; and

Resolved, That the said bill pass, two-thirds of the House of Representatives agreeing to pass the same.

Attest:

WM. TYLER PAGE,

Clerk of the House of Representatives.

IN THE SENATE OF THE UNITED STATES,

August 20, 1919.

The Senate having proceeded, in pursuance of the Constitution to reconsider the bill (H. R. 3854), "An act for the repeal of the daylight-saving law," returned to the House of Representatives by the President of the United States, with his objections, and sent by the House of Representatives to the Senate with the message of the President returning the bill.

Resolved, That the bill do pass, two-thirds of the Senate agreeing to pass the same.

Attest:

GEORGE A. SANDERSON, *Secretary.*

[PUBLIC—No. 44—66TH CONGRESS.]

[S. 2236.]

AN ACT Relating to affidavits required by the act entitled "An act to extend protection to the civil rights of members of the Military and Naval Establishments of the United States engaged in the present war."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That where any judgment has been entered since March 8, 1918, in any action or proceeding commenced in any court where there was a failure to file in such action the affidavits required by section 200 of article 2 of the act approved March 8, 1918, entitled "An act to extend protection to the civil rights of members of the Military and Naval Establishments of the United States engaged in the present war" (Fortieth Statutes at Large, page 440), the plaintiff, after such notice as the court may prescribe, may file an affidavit stating that the defendant, or defendants, in default in such judgments, are not at the time of such filing, and were not at the time of the entry of such judgment, in the naval or military service of the United States, and upon the filing of such affidavit the court may enter an order that such judgment, if otherwise legal, shall stand and be effective as of the date of the entry of such judgment as if such affidavit had been duly filed. Any person who shall make or use such an affidavit as aforesaid, knowing it to be false, shall be punishable by imprisonment not to exceed two years or by fine not to exceed \$5,000, or both, in the discretion of the court.

Approved, September 3, 1919.

[PUBLIC—No. 51—66TH CONGRESS.]

[S. 276.]

AN ACT To amend sections 4 and 5 of an act entitled "An act to provide for stock-raising homesteads and for other purposes," approved December 29, 1916.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That sections 4 and 5 of the act entitled "An act to provide for stock-raising homesteads, and for other purposes," approved December 29, 1916, be amended to read as follows:

"SEC. 4. That any homestead entryman of lands of the character herein described who has not submitted final proof upon his existing entry shall have the right to enter, subject to the provisions of this act, such amount of lands designated for entry under the provisions of this act, within a radius of twenty miles from said existing entry, as shall not, together with the amount embraced in his original entry, exceed six hundred and forty acres, and residence upon the original entry shall be credited on both entries, but improvements must be made on the additional entry equal to \$1.25 for each acre thereof: *Provided*, That the entryman shall be required to enter all contiguous areas of the character herein described open to entry prior to the entry of any noncontiguous land.

"SEC. 5. That persons who have submitted final proof upon, or received patent for, lands of the character herein described under the homestead laws, and who own and reside upon the land so acquired, may, subject to the provisions of this act, make additional entry for and obtain patent to lands designated for entry under the provisions of this act, within a radius of twenty miles from the lands theretofore acquired under the homestead laws, which, together with the area theretofore acquired under the homestead laws, shall not exceed six hundred and forty acres, on proof of the expenditure required by this act on account of permanent improvements upon the additional entry: *Provided*, That the entryman shall be required to enter all contiguous areas of the character herein described open to entry prior to the entry of any noncontiguous land."

Approved, September 29, 1919.

[PUBLIC—No. 52—66TH CONGRESS.]

[S. 277.]

AN ACT To authorize absence by homestead settlers and entrymen, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That every person who, after discharge from the military or naval service of the United States during the war against Germany and its allies, is furnished any course of vocational rehabilitation under the terms of the vocational

rehabilitation act approved June 27, 1918, upon the ground that he comes within Article III of the act of October 6, 1917, fortieth volume, Statutes at Large, page 398, and who before entering upon such course shall have made entry upon or application for public lands of the United States under the homestead laws, or who has settled or shall hereafter settle upon public lands, shall be entitled to a leave of absence from his land for the purpose of undergoing training by the Federal Board of Vocational Education, and such absence, while actually engaged in such training shall be counted as constructive residence: *Provided*, That no patent shall issue to any homestead settler who has not resided upon, improved, and cultivated his homestead for a period of at least one year.

Approved, September 29, 1919.

[PUBLIC—No. 56—66TH CONGRESS.]

[H. R. 7709.]

AN ACT To authorize the incorporated town of Petersburg, Alaska, to issue bonds in any sum, not exceeding \$75,000, for the purpose of constructing and installing a municipal electric light and power plant and for the construction of a public-school building.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the incorporated town of Petersburg, Alaska, is hereby authorized and empowered to issue bonds in any sum, not exceeding \$75,000, for the purpose of constructing and installing a municipal electric light and power plant, and for the construction of a public-school building.

SEC. 2. That before said bonds shall be issued a special election shall be ordered by the common council of the town of Petersburg, at which election the question of whether such bonds shall be issued shall be submitted to the qualified electors of said town of Petersburg whose names appear on the last assessment roll of said town for municipal taxation. Thirty days' notice of such election shall be given by publication thereof in a newspaper printed and published and of general circulation in said town before the day fixed for such election.

SEC. 3. That the registration for such election, the manner of conducting the same, and the canvass of the returns of said election shall be, as near as practicable, in accordance with the requirements of law in general or special elections in said municipality, and said bonds shall be issued only upon condition that a majority of the votes cast at such election in said town shall be in favor of issuing said bonds.

SEC. 4. That the bonds above specified, when authorized to be issued as hereinbefore provided, shall bear interest at a rate to be fixed by the common council of Petersburg, not to exceed 7 per centum per annum, payable semiannually, and shall not be sold for less than their par value with accrued interest, and shall be in denominations not exceeding \$1,000 each, the principal to be due in twenty years from date thereof: *Provided, however*, That the common council of said town of Petersburg may reserve the right to pay off such bonds in their numerical order at the rate of \$5,000 thereof per annum from and after the expiration of five years from their date. Principal and interest shall be payable in lawful money of the United States of America at the office of the town treasurer, or at such bank in the city of New York in the State of New York, or such place as may be designated by the common council of the town of Petersburg, the place of payment to be mentioned in the bonds: *And provided further*, That each and every such bond shall have the written signature of the mayor and clerk of said town of Petersburg, and also bear the seal of said town.

SEC. 5. That no part of the funds arising from the sale of said bonds shall be used for any purpose other than specified in this act. Said bonds shall be sold only in such amounts as the common council shall direct, and the proceeds thereof shall be disbursed for the purposes hereinbefore mentioned and under the order and direction of said common council from time to time as the same may be required for said purposes: *Provided*, That not to exceed \$50,000 of the proceeds of the sale of said bonds shall be expended for the construction and installation of the electric light and power plant and not to exceed \$25,000 thereof shall be expended for the construction of the public-school building.

Approved, September 29, 1919.

APPENDIX I.

Government Publications on Alaska.

RECENT SURVEY PUBLICATIONS ON ALASKA.

[Arranged geographically. A complete list can be had on application.]

All these publications can be obtained or consulted in the following ways:

1. A limited number are delivered to the Director of the Survey, from whom they can be obtained free of charge (except certain maps) on application.
2. A certain number are delivered to Senators and Representatives in Congress for distribution.
3. Other copies are deposited with the Superintendent of Documents, Washington, D. C., from whom they can be had at prices slightly above cost. The publications marked with an asterisk (*) in this list are out of stock at the Survey, but can be purchased from the Superintendent of Documents at the prices stated.
4. Copies of all Government publications are furnished to the principal public libraries throughout the United States, where they can be consulted by those interested.

The maps whose price is stated are sold by the Geological Survey and not by the Superintendent of Documents. On an order amounting to \$5 or more at the retail price a discount of 40 per cent is allowed.

GENERAL.

REPORTS.

- *The geography and geology of Alaska, a summary of existing knowledge, by A. H. Brooks, with a section on climate, by Cleveland Abbe, jr., and a topographic map and description thereof, by R. U. Goode. Professional Paper 45, 1906, 327 pp. No copies available. May be consulted at many public libraries.
- *Placer mining in Alaska in 1904, by A. H. Brooks. In Bulletin 259, 1905, pp. 18-31. 15 cents.
- The mining industry in 1905, by A. H. Brooks. In Bulletin 284, 1906, pp. 4-9.
- *The mining industry in 1906, by A. H. Brooks. In Bulletin 314, 1907, pp. 19-39. 30 cents.
- *The mining industry in 1907, by A. H. Brooks. In Bulletin 345, 1908, pp. 30-53. 45 cents.
- *The mining industry in 1908, by A. H. Brooks. In Bulletin 379, 1909, pp. 21-62. 50 cents.
- *The mining industry in 1909, by A. H. Brooks. In Bulletin 442, 1910, pp. 20-46. 40 cents.
- The mining industry in 1910, by A. H. Brooks. In Bulletin 480, 1911, pp. 21-42.
- *The mining industry in 1911, by A. H. Brooks. In Bulletin 520, 1912, pp. 19-44. 50 cents.
- The mining industry in 1912, by A. H. Brooks. In Bulletin 542, 1913, pp. 18-51.
- *The Alaskan mining industry in 1913, by A. H. Brooks. In Bulletin 592, 1914, pp. 45-74. 60 cents.
- The Alaskan mining industry in 1914, by A. H. Brooks. In Bulletin 622, 1915, pp. 15-68.
- The Alaskan mining industry in 1915, by A. H. Brooks. In Bulletin 642, 1916, pp. 17-72.
- The Alaskan mining industry in 1916, by A. H. Brooks. In Bulletin 662, 1917, pp. 11-62.
- The Alaskan mining industry in 1917, by G. C. Martin. In Bulletin 692, 1918, pp. 11-42.
- Railway routes, by A. H. Brooks. In Bulletin 284, 1906, pp. 10-17.
- Railway routes from the Pacific seaboard to Fairbanks, Alaska, by A. H. Brooks. In Bulletin 520, 1912, pp. 45-88.
- *Geologic features of Alaskan metalliferous lodes, by A. H. Brooks. In Bulletin 480, 1911, pp. 43-93.
- *The mineral deposits of Alaska, by A. H. Brooks. In Bulletin 592, 1914, pp. 18-44.
- *The future of gold placer mining in Alaska, by A. H. Brooks. In Bulletin 622, 1915, pp. 69-79.
- *Tin resources of Alaska, by F. L. Hees. In Bulletin 520, 1912, pp. 89-92. 50 cents.

- *The petroleum fields of the Pacific coast of Alaska, with an account of the Bering River coal deposits, by G. C. Martin. Bulletin 250, 1905, 64 pp. 15 cents.
- Alaska coal and its utilization, by A. H. Brooks. Bulletin 442-J, reprinted 1914.
- *The possible use of peat fuel in Alaska, by C. A. Davis. In Bulletin 379, 1909, pp. 63-66. 50 cents.
- *The preparation and use of peat as a fuel, by C. A. Davis. In Bulletin 442, 1910, pp. 101-132. 40 cents.
- *Methods and costs of gravel and placer mining in Alaska, by C. W. Purington. Bulletin 263, 1905, 362 pp. No copies available. (Abstract in Bulletin 259, 1905, pp. 32-46.)
- *Prospecting and mining gold placers in Alaska, by J. P. Hutchins. In Bulletin 345, 1908, pp. 54-77. 45 cents.
- *Geographic dictionary of Alaska, by Marcus Baker; second edition prepared by James McCormick. Bulletin 299, 1906, 690 pp. 50 cents.
- Tin mining in Alaska, by H. M. Eakin. In Bulletin 622, 1915, pp. 81-94.
- Antimony deposits of Alaska, by A. H. Brooks. Bulletin 649, 1916, 67 pp.
- The use of the panoramic camera in topographic surveying, by J. W. Bagley. Bulletin 657, 1917, 88 pp.
- The mineral springs of Alaska, by G. A. Waring. Water-Supply Paper 418, 1917, 114 pp.
- Alaska's mineral supplies, by A. H. Brooks. Bulletin 666-P, pp. 1-14.

TOPOGRAPHIC MAPS.

- Map of Alaska (A); scale 1 : 5,000,000; 1912, by A. H. Brooks. 20 cents retail or 12 cents wholesale.
- Map of Alaska (B); scale 1 : 1,500,000; 1915, by A. H. Brooks and R. H. Sargent. 80 cents retail or 48 cents wholesale.
- Map of Alaska (C); scale 1 : 12,000,000; 1916. 1 cent retail or five for 3 cents wholesale.
- Map of Alaska showing distribution of mineral deposits; scale 1 : 5,000,000; by A. H. Brooks. 20 cents retail or 12 cents wholesale. New editions included in Bulletins 642 and 662.
- Index map of Alaska, including list of publications; scale 1 : 5,000,000; by A. H. Brooks. Free.

SOUTHEASTERN ALASKA.

REPORTS.

- *The Porcupine placer district, Alaska, by C. W. Wright. Bulletin 236, 1904, 35 pp. 15 cents.
- *Economic developments in southeastern Alaska, by F. E. and C. W. Wright. In Bulletin 259, 1905, pp. 47-68. 15 cents.
- *The Juneau gold belt, Alaska, by A. C. Spencer, pp. 1-137, and a reconnaissance of Admiralty Island, Alaska, by C. W. Wright, pp. 138-154. Bulletin 287, 1906, 161 pp. 75 cents.
- Lode mining in southeastern Alaska, by F. E. and C. W. Wright. In Bulletin 284, 1906, pp. 30-53.
- Nonmetallic deposits of southeastern Alaska, by C. W. Wright. In Bulletin 284, 1906, pp. 54-60.
- Lode mining in southeastern Alaska, by C. W. Wright. In Bulletin 314, 1907, pp. 47-72.
- Nonmetalliferous mineral resources of southeastern Alaska, by C. W. Wright. In Bulletin 314, 1907, pp. 73-81.
- Reconnaissance on the Pacific coast from Yakutat to Alsek River, by Eliot Blackwelder. In Bulletin 314, 1907, pp. 82-88.
- *Lode mining in southeastern Alaska, 1907, by C. W. Wright. In Bulletin 345, 1908, pp. 78-97. 45 cents.
- *The building stones and materials of southeastern Alaska, by C. W. Wright. In Bulletin 345, 1908, pp. 116-126. 45 cents.
- *The Ketchikan and Wrangell mining districts, Alaska, by F. E. and C. W. Wright. Bulletin 347, 1908, 210 pp. 60 cents.
- *The Yakutat Bay region, Alaska; Physiography and glacial geology, by R. S. Tarr; Areal geology, by R. S. Tarr and B. S. Butler. Professional Paper 64, 1909, 186 pp. 50 cents.
- *Mining in Southern Alaska, by C. W. Wright. In Bulletin 379, 1909, pp. 67-86. 50 cents.

- *Mining in southeastern Alaska, by Adolph Knopf. In Bulletin 442, 1910, pp. 133-143. 40 cents.
- *Occurrence of iron ore near Haines, by Adolph Knopf. In Bulletin 442, 1910, pp. 144-146. 40 cents.
- *Report of water-power reconnaissance in southeastern Alaska, by J. C. Hoyt. In Bulletin 442, 1910, pp. 147-157. 40 cents.
- Geology of the Berners Bay region, Alaska, by Adolph Knopf. Bulletin 446, 1911, 58 pp.
- Mining in southeastern Alaska, by Adolph Knopf. In Bulletin 480, 1911, pp. 94-102.
- The Eagle River region, by Adolph Knopf. In Bulletin 480, 1911, pp. 103-111.
- The Eagle River region, southeastern Alaska, by Adolph Knopf. Bulletin 502, 1912, 61 pp.
- The Sitka mining district, Alaska, by Adolph Knopf. Bulletin 504, 1912, 32 pp.
- The earthquakes at Yakutat Bay, Alaska, in September, 1899, by R. S. Tarr and Lawrence Martin, with a preface by G. K. Gilbert. Professional paper 69, 1912, 135 pp.
- Marble resources of Ketchikan and Wrangell districts, by E. F. Burchard. In Bulletin 542, 1913, pp. 52-77.
- Marble resources of the Juneau, Skagway, and Sitka districts, by E. F. Burchard. In Bulletin 592, 1914, pp. 95-107.
- A barite deposit near Wrangell, by E. F. Burchard. In Bulletin 592, 1914, pp. 109-117.
- *Lode mining in the Ketchikan district, by P. S. Smith. In Bulletin 592, 1914, pp. 75-94. 60 cents.
- The geology and ore deposits of Copper Mountain and Kasaan Peninsula, Alaska, by C. W. Wright. Professional Paper 87, 1915, 110 pp.
- *Mining in the Juneau region, by H. M. Eakin. In Bulletin 622, 1915, pp. 95-102.
- Notes on the geology of Gravina Island, Alaska, by P. S. Smith. In Professional Paper 95, 1916, pp. 97-105.
- *Mining in southeastern Alaska, by Theodore Chapin. In Bulletin 642, 1916, pp. 73-104.
- Water-power investigations in southeastern Alaska, by G. H. Canfield. In Bulletin 642, 1916, pp. 105-127.
- Mining developments in the Ketchikan and Wrangell districts, by Theodore Chapin. In Bulletin 662, 1917, pp. 63-75.
- Lode mining in the Juneau gold belt, by H. M. Eakin. In Bulletin 662, 1917, pp. 71-92.
- Gold placer mining in the porcupine district, by H. M. Eakin. In Bulletin 662, 1917, pp. 93-100.
- Water-power investigations in southeastern Alaska, by G. H. Canfield. In Bulletin 662, 1917, pp. 101-154.
- The structure and stratigraphy of Gravina and Revillagigedo Islands, Alaska, by Theodore Chapin. In Professional Paper 120-D, 1918, pp. 83-100.
- Water-power investigations in southeastern Alaska, by G. H. Canfield. In Bulletin 692, 1919, pp. 43-83.
- Mining developments in the Ketchikan mining district, by Theodore Chapin. In Bulletin 692, 1919, pp. 85-89.
- The geology and mineral resources of the west coast of Chichagof Island, by R. M. Overbeck. In Bulletin 692, 1919, pp. 91-136.

In preparation.

- Marble deposits of southeastern Alaska, by E. F. Burchard. Bulletin 682.
- The Porcupine district, by H. M. Eakin. Bulletin 699.
- The Juneau district, by A. C. Spencer and H. M. Eakin.
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- Casadepega quadrangle (No. 646C); scale, 1 : 62,500; by T. G. Gerdine, W. B. Corse, and B. A. Yoder. 10 cents retail or 6 cents wholesale. Also in Bulletin 433.
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REPORT OF THE GOVERNOR OF HAWAII

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REPORT OF THE GOVERNOR OF HAWAII.

EXECUTIVE CHAMBER,
Honolulu, Hawaii, September 2, 1919.

The honorable the SECRETARY OF THE INTERIOR.

SIR: I have the honor to submit the following report from the Territory of Hawaii for the fiscal year ended June 30, 1919:

GENERAL CONDITIONS.

Conditions throughout the Territory have been generally good during the period.

With the rest of the United States, Hawaii has seriously felt the increased cost of living, but a policy of home production of foodstuffs begun during the war, the lessons of thrift which the war taught, the liberal wages generally paid, and the mild climate of these islands have tended to lessen hardships resulting therefrom.

Sugar and pineapples continue to be the main crops of the islands. The yield of sugar for the year 1919 is estimated at 600,000 tons; that of pineapples, 5,000,000 cases.

Imports for human consumption amounted to \$10,922,921, as against \$11,374,778 for the previous year, a decrease of \$955,407.

Imports from the mainland of the United States amounted to \$6,884,290, divided as follows: Provisions, meats, and dairy products, \$1,669,905; breadstuffs, \$2,052,092; eggs, \$180,030; fish, \$691,347; fruits and nuts, \$511,374; rice, \$794,085; vegetables, \$610,216; sugar, \$14,633; spirits, \$44,695; and sundry supplies, \$315,553.

Imports from foreign countries totaled \$8,322,319, of which \$4,036,806 was for food supplies. There were imported chemicals valued at \$970,463; bags, \$849,277; coal, \$543,613; cotton, \$187,967; fertilizers, \$25,517; spirits, \$1,825, and other materials, \$1,686,851.

Exports for human consumption amounted to \$83,343,648. Of this amount supplies worth \$79,132,187 were sent to the United States as follows: Bananas, \$95,346; rice, \$131,594; coffee, \$1,003,389; refined sugar, \$3,192,796; raw sugar, \$61,365,061; pineapples, \$11,929,696; sundry supplies, \$1,414,305.

Food exports to foreign countries were as follows: Coffee, \$182,986; fruits and nuts, \$60,765; sugar, \$3,939,432; rice, \$1,924; sundry, \$26,354. Total, \$4,211,461.

The excess of food exports was \$72,420,727.

The foregoing figures are from April 1, 1918, to April 1, 1919, as figures for total exports for the regular fiscal year are not yet available.

The gross tonnage of all vessels arriving at ports of the Territory during the year ended June 30, 1919, was 3,460,205, as compared with a gross tonnage of 3,800,949 for the previous fiscal period or a decrease of 340,744 tons.

Customs receipts were \$858,258.25, a decrease of \$150,985.23 from the amount for the preceding year. The Federal internal revenue receipts were \$5,831,933.19, a decrease of \$3,828,911.92. Internal revenue receipts have aggregated \$19,899,360.86 for the period of Territorial government.

PROHIBITION IN HAWAII.

On August 20, 1918, the Sheppard Act went into effect, making the Territory of Hawaii dry, and since this date there has been a wonderful decrease in crime.

This act is administered partly by Territorial officials, in that intoxicating liquors for sacramental, mechanical, medicinal, and scientific purposes are handled under rules and regulations promulgated by the governor.

No liquor except for the above purposes may be sold in the Territory, but there is a large quantity of illicit liquor manufactured, and the Federal officials are endeavoring to stamp out this traffic.

Physicians have stated that the grade of liquor being manufactured in Hawaii is rank poison, as the pipes used in the homemade stills are of galvanized iron and the liquor takes from the metal certain chemical properties which may cause blindness.

It is hoped that this illicit traffic will be wiped out in a short while, and I believe that the time would be much shortened if jail sentences instead of money fines were imposed by the courts in charge.

HARBOR IMPROVEMENTS.

In order to prepare local ports to care properly for the great amount of commerce developing on the Pacific Ocean, loans to an extent greater than is now provided for should be obtained.

By section 55 of the organic act the Territory is now permitted to borrow to a limit of 7 per cent of the assessed value of property in the Territory, and in any single year not more than 1 per cent of such assessed value.

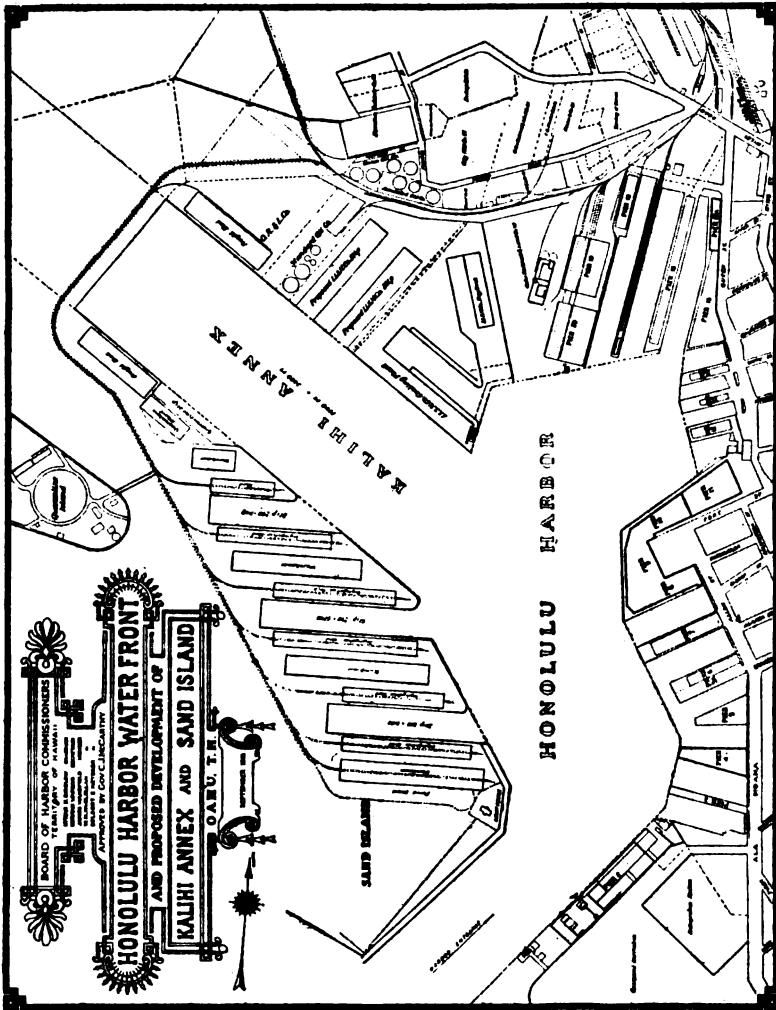
While this latter rate is sufficient at the present time—allowing about \$2,400,000 to be borrowed yearly—the 7 per cent limit is too small and should be increased, on condition that the extra amount of money thus provided for be used only for wharf and harbor improvements.

Undoubtedly a large part of the commerce of the Pacific Ocean will henceforth touch at Honolulu, particularly vessels desiring fuel and supplies. Although the route from Panama to the Orient by way of San Francisco is 200 miles shorter than by Honolulu, the calmer seas by the latter route are an inducement to bring vessels this way.

The Territorial government, as well as private interests in Honolulu and Hilo, are using every effort to make these ports attractive. Charges are low, and by increasing our facilities we will be able to give visiting vessels quick dispatch.

On the town side of Honolulu Harbor the Territory is building new concrete wharves, which should accommodate all types of vessels which may call here with freight and passengers for many years to come. To accommodate the trans-Pacific trade, which calls here mainly for fuel, water, and supplies, it is deemed necessary for the Territory to acquire title to Sand Island, on the western side of the harbor. This island was originally a coral reef covered with water at high tide, but the United States engineers in their dredging operations have pumped materials onto it, raising the grade above high-water mark.

There is submitted with this report a chart of Honolulu Harbor showing the present structures, the proposed channel into Kalihi Harbor, and the proposed improvement of Sand Island. The proposed channel is to be situated in a neck of land which divides Honolulu Harbor proper from Kalihi Harbor. The site for the channel has been recommended by every United States engineer in charge



here, and also by the Chief Engineer in Washington and the Board of Engineers for Rivers and Harbors, who have frequently recommended that Congress appropriate money for its dredging.

On July 21, 1919, the Secretary of War approved a recommendation changing the lines of Honolulu Harbor so as to include Kalihi Channel. If this channel is dredged it will make available a harbor of very deep water, several times larger than Honolulu Harbor proper, and enable Honolulu to handle all of the shipping ever likely to call.

HOMESTEADING.

Early this year the Secretary of the Interior sent to the governor of each State and Territory a copy of a uniform bill which it was proposed that each State and Territorial legislature should enact to provide lands for the returning soldiers. One of the provisions of this bill was that there should be a board of examiners, with the right to reject any applicant for land who in the board's opinion would not make a successful homesteader. If the National Government sees fit to so discriminate among the men to whom the country owes so much, recognizing that not all have the qualifications for probable success as homesteaders, I believe that the Territorial government would be justified in subjecting applicants for homesteads to a similar examination as to fitness and prospects for success.

The present laws governing homesteading in the Territory give the officials no authority to examine applicants, and the lots are assigned to them in the order of their standing in the drawing irrespective of their fitness or prospects of success as homesteaders.

The organic act of the Territory provides that upon petition of 25 or more qualified citizens the Commissioner of Public Lands shall cause to be surveyed and opened for homesteading any tract of Government land desired by the petitioners. Under the provisions of this act tracts are being opened for homesteading as the general leases expire.

The most recent homestead drawing took place in February of this year, when about 5,500 acres of Government cane land at Waiakea, South Hilo, Hawaii, was given out in 183 lots; a total of 2,242 applicants participated in the drawing for these lots, which is an indication of the eagerness with which homesteads are sought.

However, it is known that a very large percentage of the applicants had no desire to become bona fide homesteaders but took a chance on getting a lot for speculative purposes. Furthermore, a much larger percentage of the applicants were not in a position financially to handle a homestead proposition. This is clearly indicated by the fact that of the 183 successful applicants 50 per cent had to borrow money to make the required payments of 10 per cent of the purchase price at the time of selection of the lots, and a large number did not have the money to purchase a steamer ticket to Hilo. It is evident that many thus handicapped are doomed to failure from the start.

The Territorial legislature at its 1919 session adopted house concurrent resolution No. 28, which a commission is to take to Washington next winter with the idea of having Congress amend the organic act so that our land matters can be handled in such a way as to do justice not only to those applying for the land but to the taxpayers of the Territory in whose name these lands are given out.

GEOLOGICAL SURVEY.

The business of the Territory is largely agricultural and the bulk of the land most suited to agriculture is in localities deficient in rainfall. This makes large irrigation projects necessary. Extensive irrigation systems have been developed on the four main islands of the group, and without the water thus supplied most of our larger plantations could not exist. This fact justifies the large expenditures

that have been made in developing the systems that carry water, often through many miles of ditches, tunnels, and pipes, from the streams in the rainy sections to the cane fields.

Besides the use of surface streams important developments of water by artesian wells have taken place, especially on the island of Oahu.

The storage of water in large quantities has not been possible on account of unfavorable topographic features, though there are many small reservoirs.

Its water resources is one of the Territory's most valuable assets and should be developed to the fullest extent so that more land may be brought under cultivation or the land now under cultivation made more productive.

The water-resources branch of the United States Geological Survey, working in cooperation with the division of hydrography of the Territory, is engaged in a study of the surface-water streams and valuable data are being compiled.

Comparisons of rainfall and run-off show that only between 30 and 40 per cent of the rainfall reaches the sea by surface streams. Thus it is evident that enormous quantities of water flow from the mountains to the sea in underground channels.

In order to locate and tap these underground streams and so add to the productiveness of the Territory by this increased water supply, I believe that a survey of the islands should be made by trained geologists. I trust that arrangements may be made whereby men from the United States Geological Survey may be detailed for this work.

PEARL HARBOR DRY DOCK.

On Thursday, August 21, 1919, Hon. Josephus Daniels, Secretary of the Navy, officially opened the new concrete dry dock at Pearl Harbor, island of Oahu.

This dock is 1,001 feet long, 123 feet wide, and 35 feet deep, and can accommodate the largest vessel afloat.

Besides the dock there are all the necessary shops for making repairs to vessels. There is also a coal dock with storage space for a large quantity of coal.

ELECTIONS.

The territorial elections are held in November of each even year and the only officers who are elected are the Delegate to Congress from Hawaii, for two years; one-half of the members of the senate, for four years; and all of the members of the house of representatives, for two years. The county and city and county elective officers are the mayor of the city and county of Honolulu and the supervisors, attorney, clerk, treasurer, auditor, and sheriff of each county and city and county.

In the city and county of Honolulu and in the county of Maui the supervisors are elected at large, while in Kauai they are elected from the five districts making up that county. Since 1913 the county of Hawaii has had a system of electing three supervisors from each of the two representative districts, and one, the chairman of the board, from the island at large.

In 1913 a direct-primary law was enacted by the legislature. Provision was also made whereby the counties of Hawaii, Kauai, and Maui could hold elections separately from the territorial elections, namely, in May of each odd year. Under this law elections were held in these counties in May, 1915. In 1915 a law was passed which provided that all general elections of officers of the city and county of Honolulu after 1915 should be in May, 1917, and biennially thereafter. The 1917 legislature enacted amendments so that general elections of the counties and city and county of Honolulu would be held in June, 1917, and biennially thereafter.

The 1919 legislature enacted amendments to the election laws so that general elections of the counties and of the city and county of Honolulu would be held on the first Tuesday after the first Monday in June, 1919, and biennially thereafter in the counties of Kauai and Maui only. In the city and county of Honolulu and the county of Hawaii, the next general election for county and city and county officers will be held on the first Tuesday after the first Monday in the month of November in the year 1923 and every four years thereafter.

Statistics covering the last general election held in November, 1918, are as follows:

Registered voters, by races, at each general election.

	Population 1910.		Registered voters.												
	Total.	Male citizens of vot- ing age.	1900	1902	1904	1906	1908	1910	1912	1914	1916	1918	Gain.	Loss.	
Hawaiian...	38,547	9,802	8,680	9,260	9,635	8,967	9,619	9,435	10,308	10,763	10,901	138			
Portuguese...	22,303	2,025	594	728	939	1,230	1,530	1,769	2,317	2,610	2,844	234			
Chinese...	21,674	670	143	175	220	272	396	486	654	777	954	177			
Japanese...	79,674	53	3	2		6	13	48	112	179	287	108			
American...			1,932	1,872	1,674	1,715	1,763	2,365	3,020	3,284	3,810	526			
British...			546	542	563	567	554	544	629	648	636				
German...	29,711	5,783	309	301	301	322	333	299	659	720	692				
Others...			405	373	246	195	234	239							
Total...	191,909	18,333	11,216	12,612	13,253	13,578	13,274	14,442	15,185	17,699	18,981	20,124	1,183	40	
Increase...				1,396	641	325	304	1,168	743	2,514	1,282	1,143			

RECAPITULATION.

	Registered voters.										
	1900	1902	1904	1906	1908	1910	1912	1914	1916	1918	Gain.
Hawaiian.....		8,680	9,260	9,635	8,967	9,619	9,435	10,308	10,763	10,901	138
Anglo-Saxon and Latin.....		3,786	3,816	3,723	4,029	4,414	5,216	6,625	7,262	7,982	720
Oriental.....		146	177		220	409	534	766	956	1,241	285
Total.....	11,216	12,612	13,253	13,578	13,274	14,442	15,185	17,699	18,981	20,124	1,143
Increase or decrease:											
Hawaiian.....			+580	+375	-668	+652	-184	+873	+455	+138	.....
Anglo-Saxon and Latin.....			± 30	- 93	+306	+385	+802	+1,409	+637	+720	.....
Oriental.....			+ 31	+ 43	+ 58	+131	+125	+232	+190	+285	.....
Total.....			+641	+325	-304	+1,168	+743	+2,514	+1,282	+1,143	.....

Votes cast for Delegate to Congress at each general election.

Parties.	1900	1902	1904	1906	1908	1910	1912	1914	1916	1918
Republican.....	3,856	6,028	6,833	7,304	5,698	8,049	7,023	8,590	7,702	7,343
Democratic.....	1,650		2,848	2,884	3,824	4,503	5,770	2,609	5,637	6,032
Home Rule.....	4,063	4,698	2,289	2,182	2,794	989	346			
Socialist.....							201			
Progressive.....								610		
Total.....	9,569	11,326	11,990	12,430	12,316	13,541	13,340	11,809	13,339	13,375
Votes not cast or not counted..	1,627	1,286	1,263	1,148	958	901	1,843	5,890	5,642	6,749

Senators and representatives, by parties and races, in each legislature.

Biennial session.	Party.			Race.		
	Republican.	Democratic.	Home Rule.	Hawaiian.	Portuguese.	Other whites.
Senators:						
1901.....	6		9	10		5
1903.....	10	1	4	9		6
1905.....	14			7		8
1907.....	12	2	1	8		7
1909.....	9	4	2	8		7
1911.....	12	1	2	8		7
1913.....	18	15	2	16		19
1915.....	8	7		7		8
1917.....	12	3		8	1	6
1919.....	14	1		7	1	7
Representatives:						
1901.....	9	4	17	23		7
1903.....	20		10	23		7
1905.....	28	1	1	21		9
1907.....	24	6		24	2	4
1909.....	22	7	1	21	3	6
1911.....	28		2	20	3	7
1913.....	18	11	1	20	2	8
1915.....	29	1		19	4	7
1917.....	24	6		20	5	5
1919.....	24	6		21	5	4

At the beginning of the session 1913 there were 9 Republican, 4 Democratic, 2 Home Rule, 5 Hawaiian, and 10 white senators, but during the session 1 white Republican senator died and a Hawaiian Democrat was elected in his place at a special session.

LEGISLATURE.

The principal business enacted by the legislature at the session of 1919 was financial. Of the 242 acts approved, 94 involved money from the general fund. In addition the legislature enacted a loan bill providing for public improvements to the amount of \$1,901,698, more than half of which is for wharf and harbor improvements. Concurrent resolutions were also adopted recommending that the governor set aside lands for nine public parks. Certain members of the 1919 legislature, by going back on their pledge to support woman suffrage, earned the ill will of a large majority of the people, and as a result the legislature received little credit for any good legislation. Following is a list of some of the measures enacted:

Act 15. To provide for a quarantine station in the city of Hilo.

Act 22. Permitting the practice of chiropractic.

Act 50. Providing for the issuance of \$200,000 of bonds to build a breakwater at Nawiliwili, Kauai, the Federal Government to appropriate at least an equivalent amount.

Act 62. Amending the municipal act.

Act 63. Modifying the power of eminent domain as exercised by counties.

Act 73. Providing for training of nurses at the Queen's Hospital and issuing certificates to them.

Act 83. Giving further protection to forest reserves.

Act 97. Providing for an appropriation for the celebration of the centennial of the death of Kamehameha I.

Act 102. Making an appropriation to provide for the feeble-minded.

Act 107. Providing an increase in the pay of school teachers.

Act 109. Relating to the storage of explosives.

Act 118. Making an appropriation to build a wharf at Kapaa, Kauai.

Act 121. Providing for a fish and game commission, to establish a fish hatchery and appropriating \$25,000 for the use of the commission.

Act 129. To provide for the support of children of indigent, widowed, or abandoned mothers, and creating local boards to administer such support.

Act 131. For the establishment of a school for blind and other defective children.

Act 138. Providing for the acquisition of property at Nawiliwili, Kauai, for wharf and warehouse purposes.

Act 158. Amending the sinking fund act.

Act 186. Defining the crime of criminal syndicalism and providing punishment therefor.

Act 187. Making an appropriation to provide for calling a Pan-Pacific Congress in Honolulu, 1920-21.

Act 190. Providing for the purchase of the Irwin Beach property at Waikiki, to be made a part of Kapiolani Park.

Act 203. Changing the College of Hawaii to a university.

Act 207. Consolidating all the laws providing for the issuance of public loans.

Act 212. Establishing a biological laboratory at the Kapiolani Park Aquarium and placing the College of Hawaii in charge.

Act 225. Farm loan act, with an appropriation of \$100,000 for advances to homesteaders.

Act 227. Providing for the identification of automobiles belonging to the Territorial or county governments, so as to be used for official business only.

Act 229. Providing for the purchase of Washington Place, the former residence of Queen Liliuokalani, as an executive mansion.

Act 233. Regulating investment companies so as to provide against fraud in the sale of securities.

The legislature adopted a concurrent resolution providing for the appointment by the governor of a commission to have charge of the celebration in 1920, of the landing here of the first missionaries, March 31, 1820.

Following is a list of some of the more important resolutions passed:

House concurrent resolution 2. Requesting Congress to amend the Federal farm loan act so as to include the Territory of Hawaii in its provisions.

House concurrent resolution 3. Requesting Congress to amend the organic act so as to allow the homesteading of larger areas of pastoral lands.

House concurrent resolution 4. Requesting Congress to appropriate funds for roads and water systems in homestead tracts and to assist homesteaders and farmers in the Territory of Hawaii.

House concurrent resolution 16. Requesting Congress to enact a law so as to allow half the customs and internal revenue receipts collected in the Territory of Hawaii for 20 years from date of July 1, 1918, to be placed in a separate fund and expended only for public works in the Territory of Hawaii.

House concurrent resolution 28. Requesting Congress to amend the organic act in regard to homesteading.

House concurrent resolution 30. Asking that suspension of the coastwise shipping law, as applied to passenger traffic, remain in force until more American steamers are plying between Hawaii and the mainland of the United States.

Senate concurrent resolution 5. Requesting the right of statehood for the Territory of Hawaii.

Senate concurrent resolution 7. Requesting Congress to extend the benefits of the reclamation act to Hawaii.

Senate concurrent resolution 8. Favoring the enactment of a law whereby persons appointed to Federal positions in the Territory of Hawaii shall have resided for not less than one year in such Territory.

Senate concurrent resolution 11. Requesting an amendment to an act of Congress approved March 28, 1916, so as to authorize the Territorial board of harbor commissioners to make toll or tonnage charges on freight passing over wharves, etc.

Senate concurrent resolution 17. Requesting that the abandoned Federal Leprosarium at Kalawao, Molokai, be turned over to the Territorial board of health for the care and treatment of lepers.

Senate concurrent resolution 20. Directing the attorney general of the Territory of Hawaii to compile a list of, and a report upon the cost incident to the acquisition by condemnation of all private fishing rights within the Territory of Hawaii.

Senate concurrent resolution 31. Providing for the appointment by the governor of a commission to investigate and report on the feasibility of establishing a free port or zone in the Territory of Hawaii.

Senate concurrent resolution 36. Authorizing and requesting the governor to appoint a commission to be known as the "Legislative Commission of the Territory," for the purpose of assisting the Delegate to Congress by their presence in Washington in the presentation of measures to Congress.

Work of legislatures.

Year.	Days in session.	Cost of session. ¹	Cost per day.	Cost per bill passed.	Bills introduced.	Bills passed.	Bills vetoed. ²	Vetoed sustained.
1901.....	116	\$94,654.94	\$816.00	\$3,505.75	342	27	3	2
1902 ³	12	4,025.70						
1903.....	120	90,943.94	757.86	837.96	415	106	8	7
1904 ⁴	12	11,079.68			24	14	1	1
1905.....	103	62,590.06	605.57	563.80	387	111	22	14
1907.....	60	57,258.35	954.31	406.08	361	141	26	14
1909.....	60	55,225.02	970.42	353.06	388	152	8	7
1909 ⁴	5	11,636.61			7	2		
1911.....	60	70,245.84	1,170.75	415.66	410	169	5	3
1913.....	60	85,495.75	1,391.59	491.15	466	170	6	6
1915.....	60	71,478.67	1,191.31	316.28	488	226	3	3
1917.....	60	84,087.23	1,401.45	346.91	607	241	3	2
1918 ⁴	15	16,367.23	1,081.15	554.54	64	28	1	
1919.....	60	56,035.78	1,433.93	342.77	616	242		

¹ Part of the expenses of the last six regular sessions were paid out of the Federal appropriations, as follows: 1907, \$27,349.04; 1909, \$29,939.26; 1911, \$28,938.38; 1913, \$30,000; 1915, \$30,000; 1917, \$27,409.14; 1919, \$30,000.

² The vetoes in the table do not include vetoes of items in appropriation bills or pocket vetoes. The record as to items in appropriation bills is as follows: In 1903, 48 vetoes, all sustained; in 1905, 42 vetoes, 35 sustained; in 1907, 13 vetoes, 3 sustained; in 1909, 10 vetoes, 8 sustained; in 1911, 3 vetoes, 1 sustained; in 1913, 3 vetoes, all sustained; in 1915, none; in 1917, 1 veto, overridden; in 1919, none. The record as to pocket vetoes is as follows: In 1904, 12; in 1907, 13; in 1909, 17; in 1911, 6; in 1913, 9; in 1915, 4; in 1917, 10; in 1919, 9.

³ Special session of the senate.

⁴ Special session of the legislature.

COUNTY AND CITY AND COUNTY GOVERNMENTS.

Local governments in Hawaii were first established on July 1, 1905, the Territory being divided into four counties. On January 1, 1909, the county comprising the Island of Oahu was converted into a city and county, known as the city and county of Honolulu, with a mayor.

The leper settlement on the Island of Molokai forms a fifth county, Kalawao, under the control of the Territorial board of health.

Following is a table showing the income of the various counties for the fiscal year ended June 30, 1919. It will be noted that there is an increase of \$820,620.46 over the income for the previous period.

Income of counties, fiscal year ended June 30, 1919.

Counties.	Collected by Territory for counties.		Collected by counties.				Total.
	General taxes.	Road tax.	License fees.	Fines and costs.	Water and sewer rates.	Miscellaneous.	
Honolulu, Oahu.....	\$1,685,749.07	\$165,486.79	\$112,825.63	\$47,235.42	\$244,598.65	\$448,096.54	\$2,703,992.10
Hawaii.....	742,817.71	69,157.12	53,549.66	33,904.61	19,640.54	22,705.83	941,775.47
MauI.....	509,843.52	48,578.89	23,724.14	14,826.95	23,184.36	17,407.70	637,565.56
Kauai.....	321,580.52	35,709.30	15,777.74	13,170.53	6,221.36	17,067.05	409,528.50
Total, 1919.	3,259,990.82	318,932.10	205,877.17	109,137.51	293,644.91	505,277.12	4,692,859.63
Total, 1918.....	2,613,966.58	312,289.47	266,013.12	118,902.51	286,615.49	275,452.00	3,872,239.17
Increase....	646,024.24	6,642.63			7,029.42	229,825.12	820,620.46
Decrease....			59,135.95	9,765.00			

FINANCES.

BONDED INDEBTEDNESS.

By the provisions of section 55 (31 Stat., 141), as amended by Statutes 36, page 443, the Territory is permitted to issue bonds not to exceed 7 per cent on the total assessed value of property in the Territory, but not more than 1 per cent in any one year.

The last completed assessment amounts to \$250,524,346, therefore the borrowing limit is \$17,536,704.22.

The total bonded debt on July 1, 1918, was \$8,749,000, which was increased by the sale of \$445,000 of the August 1, 1917, issue of 4 per cent public improvement bonds, 1917, out of a total authorized issue of \$1,500,000.

The legislature at its 1919 session provided for a bond issue of \$2,231,000. Since June 30, bonds amounting to \$200,000 have been issued, and the Territorial treasurer is now on the mainland for the purpose of floating additional bonds to the amount of \$1,500,000. The issue of \$200,000 is for the purchase of the Irwin estate property at Waiiki Beach, Honolulu, as a memorial park for Hawaii's heroes in the Great War.

Territorial bonded indebtedness, June 30, 1919.

Date of issue.	Term of years.	Inter-est.	Sale price.	Percent-age basis.	Aggregate outstand-ing.	Date due.	Where sold.
		<i>Percent.</i>					
Oct. 4, 1905	5 to 15	4	\$101.375	3.70	\$270,000	Oct. 4, 1920	Honolulu.
Jan. 2, 1906	5 to 15	3½	98.125	3.66	750,000	Jan. 2, 1921	New York.
Oct. 1, 1907	5 to 15	3½	98.150	3.66	294,000	Oct. 1, 1922	Honolulu.
Oct. 1, 1909	5 to 15	3½	98.250	3.65	200,000	Oct. 1, 1924	Do.
Aug. 1, 1911	20 to 30	4	101.5875	3.88	1,800,000	Aug. 1, 1941	New York.
Sept. 3, 1912	20 to 30	4	100.5887	3.985	1,500,000	Sept. 3, 1942	Do.
Sept. 15, 1914	20 to 30	4	100.01	4.00	1,430,000	Sept. 15, 1944	New York and Honolulu.
May 15, 1916	20 to 30	4	100.00	4.00	1,750,000	May 15, 1946	Do.
Aug. 1, 1917	20 to 30	4	98.04	4.08	1,500,000	Aug. 1, 1947	Do.
Total..	.....			.....	9,194,000		.....

The total bonded debt on July 1, 1918, was \$8,749,000, which was increased by the sale of \$445,000 of the Aug. 1, 1917, issue of 4 per cent public improvement bonds, 1917, out of a total authorized issue of \$1,500,000.

RECEIPTS AND DISBURSEMENTS.

The greater part of the county revenues are collected by the Territory and turned over to the various counties, while, in turn, the Territory receives back from them the cost of assessing and collecting taxes and the interest and sinking fund on bonds issued by the Territory for the benefit of the counties.

Cash on hand and floating indebtedness, general account, at end of each fiscal year since organization of Territorial government.

Fiscal years.	Cash on hand.	Outstanding warrants.	Net floating indebtedness.	Net cash available for ensuing year.
1901.	\$75,994.97	\$176,495.45	\$100,500.48	.....
1902.	287,131.30	297,427.87	10,296.57	.....
1903.	73,181.63	240,713.42	167,531.79	.....
1904.	56,613.29	708,014.31	652,401.02	.....
1905.	59,408.49	603,426.89	544,018.40	.....
1906.	335,331.37	72,227.96	.....	\$263,103.41
1907.	348,216.51	34,740.49	.....	313,476.02
1908.	391,737.19	225,891.71	.....	165,845.48
1909.	134,759.21	170,718.67	35,959.46	.....
1910.	845,218.51	146,247.55	.....	698,970.96
1911.	822,282.07	161,977.58	.....	660,304.49
1912.	690,550.70	69,141.66	.....	621,409.04
1913.	716,729.60	56,008.61	.....	660,720.99
1914.	366,001.24	43,955.84	.....	322,045.40
1915.	464,040.43	49,162.62	.....	414,877.81
1916.	539,368.71	51,306.23	.....	488,062.48
1917.	889,508.42	95,102.12	.....	794,406.30
1918.	711,517.21	150,106.63	.....	561,410.58
1919.	442,609.95	100,296.26	.....	342,313.69

Treasury cash balances, all accounts, at end of fiscal years 1916, 1917, 1918, and 1919.

Accounts.	1916	1917	1918	1919
Current revenues:				
General.....	\$539,388.71	\$889,508.42	\$771,517.21	\$442,609.95
Immigration.....	101,218.50	103,217.98	105,151.17	.....
Sanitation fund.....	151,967.43	134,382.01	210,935.98	228,596.88
School fund.....	94,573.24	85,338.37	158,960.91	186,099.70
Sinking fund.....	55,217.54	78,410.95	76,729.04	50,200.91
Special land sales.....	157,185.59	136,281.17	215,260.19	255,574.71
Miscellaneous special funds.....	91,825.99	84,189.97	125,589.81	179,282.56
Total.....	1,191,377.00	1,511,808.87	1,604,134.26	1,342,364.71
Loan fund.....	998,653.48	566,330.42	1,043,462.95	1,023,614.64
Grand total.....	2,190,030.48	2,077,639.29	2,647,597.21	2,365,979.35

Receipts and disbursements, general account, fiscal year ended June 30, 1919.

RECEIPTS.

Taxes:	
Real property.....	\$2,413,759.22
Personal property.....	1,849,389.76
Interest and penalties.....	16,175.54
Specific property (autos, carriages, etc.).....	204,683.28
Income, general.....	625,073.76
Income, special.....	283,281.75
Personal (poll, school, road).....	290,638.04
	<hr/>
Insurance.....	\$5,683,001.35
Inheritance.....	58,066.53
Documentary.....	44,777.82
Land sales.....	310.00
Land revenue (rents, etc.).....	188,419.16
Harbor, wharf, and pilot revenues.....	350,259.43
Recording fees.....	167,661.61
Fines and costs.....	26,198.50
Support of United States prisoners.....	849.93
Interest on bank deposits (exclusive of loan).....	11,543.25
Miscellaneous.....	25,373.32
	<hr/>
Total receipts.....	6,861,381.62

Transfers from special funds.....	\$678, 828. 92	
Paid by counties.....	381, 461. 36	
		<u>\$1, 060, 290. 28</u>
Total.....		7, 921, 671. 90
Cash balance, June 30, 1918.....		<u>711, 517. 21</u>
		8, 633, 189. 11

DISBURSEMENTS.

Legislature.....	\$51, 283. 27	
Elections.....	12, 559. 45	
Incidentals, governor's office.....	997. 56	
Governor's and secretary's office.....	14, 904. 14	
Library of Hawaii.....	18, 503. 28	
Archives bureau.....	7, 037. 93	
National Guard and Naval Militia.....	35, 512. 14	
Promotion.....	6, 000. 00	
Expenses, food commission.....	4, 402. 28	
Pensions.....	7, 387. 10	
Auditing department.....	14, 098. 23	
Treasury department.....	52, 445. 34	
Tax bureau.....	111, 161. 07	
College of Hawaii.....	20, 034. 86	
Public works department.....	58, 875. 17	
Harbor commission.....	121, 196. 72	
Public lands department.....	79, 747. 62	
Survey department.....	27, 387. 71	
Expenses land board.....	1, 208. 63	
Public health department.....	595, 333. 49	
Judiciary department.....	17, 411. 24	
Attorney general's department.....	25, 071. 17	
Prison.....	97, 307. 99	
Record bureau.....	23, 017. 54	
Hilo public library.....	4, 437. 64	
Improvements, Kauai farm and sanitarium.....	498. 83	
Hawaiian dictionary.....	3, 434. 36	
Industrial accident boards.....	7, 927. 71	
Agriculture and forestry.....	98, 909. 23	
Immigration.....	80. 00	
Expenses county agents.....	3, 330. 51	
Decisions United States district court.....	2, 810. 75	
Liquor commission.....	500. 00	
Establishment and maintenance school for defective children.....	8, 993. 48	
Industrial schools.....	98, 009. 98	
Expenses, entertainment.....	576. 67	
Employing temporary substitutes.....	28, 965. 51	
Expenses, Waikiki lands commission.....	2, 418. 12	
Maui County farm and sanitarium.....	4, 877. 18	
Territorial market.....	16, 265. 89	
Reimbursing city and county of Honolulu for street improvements.....	53, 045. 28	
Expenses, commission to investigate feeble-mindedness....	43. 80	
Contingent fund.....	47, 266. 88	
Celebration anniversary Kamehameha I.....	6, 769. 40	
		<u>\$1, 792, 045. 15</u>
Interest on public debt.....		<u>351, 267. 00</u>
		2, 143, 312. 15

Transferred to special accounts:

Sinking fund.....	\$344,918.07	
Land purchases.....	20,223.03	
Homestead roads.....	136,838.58	
Surveying and opening homesteads.....	5,000.00	
Registering land assurance.....	726.45	
Industrial schools.....	4,064.81	
College of Hawaii.....	13,139.99	
Sanitation fund.....	18,470.66	
School fund.....	1,601,444.14	
Public utilities fund.....	13,865.99	
Armory boards.....	629.40	
Kalaupapa store revolving fund.....	46,842.83	
Marketing division revolving fund.....	71,823.52	
Insurance fund.....	23,200.47	
Homesteads' improvements.....	265.25	
Teachers' pension fund.....	4,273.40	
Immigration fund.....	620.61	
Lahainaluna school.....	12,908.84	
Forest reserve fund.....	751.33	
Kaupakalua land sales.....	3,303.71	
Animal industry fund.....	5,014.67	
Mechanical live stock and horticultural fairs.....	69,624.69	
Sanitorium insane asylum.....	1,026.10	
Relief of Geo. A. McEldowney.....	134.19	
Royal school.....	3,985.00	
Industrial accident board, Maui.....	12.00	
Farm loan reserve.....	15,000.00	
Normal school.....	326.00	
Transfer to treasury collection.....	99.99	
		<hr/>
		\$2,418,533.72

Paid to counties:

City and county of Honolulu.....	1,851,235.86	
County of Hawaii.....	811,974.83	
County of Maui.....	558,422.41	
County of Kauai.....	357,289.82	
		<hr/>
		3,578,922.92

		<hr/>	8,140,768.79
Outstanding warrants June 30, 1918.....			150,106.63
			<hr/>
			8,290,875.42
Current cash balance.....	442,609.95		
Outstanding warrants.....	100,296.26		
		<hr/>	
			342,313.69
			<hr/>
Total.....			8,633,189.11

SPECIAL FUNDS.

Statement of all special funds for fiscal year ending June 30, 1919.

Funds.	Net cash, July 1, 1918.	Receipts.		Expenditures.		Net cash, June 30, 1919.
		Receipts.	Transfers from other accounts.	Total available.	Expenditures.	Total expenditures.
School.....	\$119,379.61	\$1,151,444.14	\$450,000.00	\$1,720,923.75	\$1,107,965.82	\$162,857.93
Sanitation.....	210,907.68	18,470.66		229,378.34	855.59	228,522.75
Sinking.....	76,729.04	344,918.07	5,000.50	429,647.61	276,446.70	50,200.91
Surveying and opening homesteads.....	2,298.24	5,000.00		7,298.24	6,659.27	1,638.97
Homestead roads:						
Oahu.....	227.65	12,078.94		12,306.59	130.00	1,308.75
Hawaii.....	92,113.12	92,980.89		185,094.01	16,912.59	128,181.42
Maul.....	320.55	8,071.03		8,391.58	50.08	8,341.50
Kauai.....	7,333.65	13,010.75		20,344.40		12,476.58
Kawahau.....						
Kaneohe.....	978.05		4,000.00	4,978.05	975.00	4,003.05
Kaimu.....	1,586.47			1,586.47		1,586.47
Kalua.....	1,167.05			1,167.05		1,167.05
Piholo.....	457.95			457.95		
Puukapu.....	414.82	5,506.78		5,921.60		
Waialea.....			25,000.00	25,000.00		2,540.12
Papaaloa.....			6,000.00	6,000.00		6,000.00
Puukapu.....			10,000.00	10,000.00		10,000.00
Kalapa.....			2,000.00	2,000.00		2,000.00
Omao.....						
Residence tract roads:						
Kawaloa.....	3,892.31			3,892.31		3,892.31
Kulouou.....	8,299.51	319.10		8,618.61		8,618.61
Olae.....	283.14	259.38		542.52		542.52
Auwalolunui.....	4,300.26			4,300.26		1,440.36
Matiki Round Top.....	6,075.99	770.32		6,846.31	2,950.00	4,758
Waloli.....	862.83			862.83	47.53	6,788.73
Kaneohe.....	2,981.00	2,032.95		5,013.95		892.83
Walohuli-Keekaa.....	168.39	1,808.44	50.08	2,026.91	4,000.00	1,013.95
Land purchases:						
Oahu.....	45,753.05	922.00		46,675.05	5,258.98	41,416.07
Hawaii.....	31,806.10			31,806.10		31,806.10
Maul.....	1,044.00	2,989.68		4,033.68		4,033.68
Kauai.....		16,310.75		16,310.75		16,310.75

College of Hawaii.....	142.88	13, 139.99	13, 282.87	13, 277.61	13, 277.61	5.26
Lahainauna School.....	8,354.93	12, 968.84	21, 283.77	13, 096.58	13, 096.58	8, 167.19
Road, Napoona, South Kona.....	3,285.75	50.00	3, 285.75	3, 285.75	3, 285.75	.....
College of Hawaii scholarship account.....	50.00	1,348.97	1, 391.09	50.00	50.00	.....
Girls' industrial school.....	42.12	2, 715.84	3, 236.77	2, 731.54	497.91	893.18
Boys' industrial school.....	520.63	751.33	4, 775.62	1, 053.03	2, 731.54	505.23
Forestry preservation.....	4, 024.29	.....	571.83	7, 808.09	1, 053.03	3, 722.99
Marketing bureau.....	571.83	726.45	8, 035.06	681.00	7, 808.09	571.83
Land registration assurance.....	7, 956.61	205.25	1, 468.25	4, 473.33	681.00	876.87
Homesteaders' improvements.....	1, 201.00	3, 303.71	4, 473.33	8, 999.71	4, 473.33	785.26
Kaupakaha land sales.....	1, 169.62	13, 865.99	21, 775.72	141.45	8, 999.71	12, 776.01
Public utilities commission.....	7, 909.73	629.40	807.04	46, 036.48	141.45	663.19
Armory boards.....	178.24	46, 842.83	76, 557.20	61, 528.44	46, 036.48	208.47
Kalaupapa store.....	2 12	71, 823.52	45, 622.87	43, 584.83	61, 528.44	15, 028.76
Marketing division.....	4, 733.68	23, 200.47	105, 701.78	105, 701.78	43, 584.83	2, 038.04
Territorial insurance fund.....	22, 422.40	620.61	20, 292.92	17, 654.13	105, 701.78	.....
Immigration fund.....	105, 141.17	4, 273.40	5, 000.00	654.39	17, 654.13	2, 638.79
Teachers' pension fund.....	16, 019.52	1, 026.10	2, 091.75	654.39	654.39	6, 000.00
Filling lands and proposed roadway, Ponoahai, Hilo.....	5, 000.00	.....	2, 794.00	67, 956.06	67, 956.06	1, 437.36
Sanitarium, insane asylum.....	1, 065.65	.....	74, 326.19	134.19	2, 794.00	2, 794.00
Ponoahai lots.....	2, 794.00	69, 634.69	134.19	99.62	6, 370.13	.....
Mechanical, live stock, and horticultural fair.....	4, 701.50	134.19	3, 985.00	750.90	99.62	3, 985.38
Relief, Geo. A. McDowney.....	.....	3, 985.00	326.00	.....	750.90	326.00
Royal school, special fund.....	.....	326.00	5, 014.67	12.00	.....	4, 263.87
Normal school, special fund.....	.....	5, 014.67	12.00	.....	12.00	12.00
Animal industry revolving fund.....	.....	12.00	15, 000.00	.....	.....	15, 000.00
Industrial accident board, Maui.....	.....	15, 000.00	3, 287, 244.74	1, 708, 905.02	2, 434, 684.02	852, 560.72
Farm loan reserve fund.....	.....	.....	1, 476, 813.56	454, 779.19	454, 779.19	1, 022, 034.37
Total special funds.....	816, 700.43	1, 968, 433.73	502, 050.58	5, 722, 235.07	8, 140, 768.79	342, 313.69
Loan fund.....	1, 019, 302.34	457, 451.22	678, 828.92	7, 885, 819.28	11, 030, 232.00	2, 216, 908.78
General fund.....	561, 410.58	7, 242, 842.98	13, 247, 140.78	3, 144, 412.72	.....	.....
Total, all funds.....	2, 397, 533.35	9, 668, 727.93	1, 180, 879.50	.....	.....	.....

Taxes collected for the year ended June 30, 1919, by races, etc., of taxpayers, inclusive of interest, penalties, and costs.

Kind of taxes, etc.	Anglo-Saxons.	Hawaiians.	Portuguese and Spanish.	Chinese.	Japanese.	Total.
Real property:						
Corporations, firms, etc.....	\$1,456,071.01	\$122,177.65	\$2,186.05	\$12,669.55	\$8,233.00	\$1,601,337.26
Other than corporations, firms, etc.....	453,330.70	220,223.68	89,953.59	54,155.60	29,986.06	847,649.63
Personal property:						
Corporations, firms, etc.....	1,585,118.14	1,759.45	5,861.05	30,378.94	15,977.70	1,639,095.28
Other than corporations, firms, etc.....	67,393.36	29,554.17	14,168.74	22,703.41	57,422.67	191,242.35
Specific property: Automobiles, carriages, etc.....	107,126.07	14,957.10	19,044.93	13,934.95	56,173.93	211,236.98
Personal: Poll, road, school	33,965.39	25,869.19	51,139.85	27,159.20	145,950.71	234,084.34
Income, general:						
Corporations, firms, etc.....	490,104.11	3,522.75	592.30	1,557.57	3,862.01	499,639.74
Other than corporations, firms, etc.....	100,037.62	13,753.02	5,464.36	3,049.35	3,130.67	125,435.02
Income, special:						
Corporations, firms, etc.....	256,345.07	1,761.40	327.35	777.43	1,929.89	261,141.19
Other than corporations, firms, etc.....	17,406.61	3,116.35	777.15	395.10	445.35	22,140.56
Total.....	4,566,893.08	436,694.76	189,515.37	166,781.15	323,111.99	5,683,001.35

Taxes, by years, ended June 30, since organization of Territorial government.¹

Fiscal year.	Real property.	Personal property.	Specific property.	Personal	Income, general. ²
1901.....	\$144,059.63	\$490,392.69	\$18,751.36	\$249,604.00	-----
1902.....	532,637.09	571,248.69	20,412.19	231,485.00	\$286,630.20
1903.....	560,456.31	592,325.37	22,591.80	255,043.00	202,526.44
1904.....	618,890.81	607,589.82	22,998.80	240,736.00	170,511.71
1905.....	609,343.72	570,654.55	23,545.50	249,990.00	155,978.87
1906.....	961,433.76	928,841.63	47,989.70	243,955.00	891,366.65
1907.....	654,737.94	631,326.36	39,644.40	239,001.00	187,687.91
1908.....	640,051.42	635,265.81	41,350.50	244,832.00	266,241.74
1909.....	668,721.89	678,898.40	40,968.00	235,520.00	389,500.94
1910.....	709,943.35	720,252.68	46,554.50	248,663.00	435,964.40
1911.....	766,429.68	733,806.45	49,734.95	241,915.00	421,375.68
1912.....	893,331.32	821,618.96	56,930.55	243,058.00	488,415.96
1913.....	1,037,200.82	915,470.52	64,626.21	242,307.30	513,586.40
1914.....	1,098,267.52	868,613.53	74,913.10	286,246.55	397,496.33
1915.....	1,200,618.75	928,231.86	89,817.75	257,890.00	373,349.09
1916.....	1,378,454.92	1,092,693.27	110,230.97	265,636.05	592,259.58
1917.....	1,547,872.50	1,224,652.02	152,572.99	275,432.65	799,800.86
1918.....	1,967,650.23	1,510,659.70	205,901.57	279,215.07	794,427.22
1919.....	2,413,759.22	1,849,389.76	211,236.98	284,084.34	625,073.76

Fiscal year.	Income, special. ³	Penalties, costs and interest. ³	Inheritance.	Insurance.	Total.
1901.....		\$9,294.58	\$639.29	\$3,223.65	\$1,216,265.20
1902.....		11,847.92	6,074.34	3,846.00	1,664,181.43
1903.....		13,385.29	1,393.33	4,685.11	1,652,406.45
1904.....		15,848.97	70.00	4,623.38	1,681,269.49
1905.....		16,509.18	6,271.71	6,883.59	1,639,175.12
1906.....		13,703.59	5,879.69	8,760.61	2,601,930.53
1907.....		21,435.83	8,789.74	14,202.74	1,796,825.92
1908.....		17,697.93	21,430.05	13,978.38	1,880,847.81
1909.....	\$4,323.29	19,137.76	17,011.88	26,564.55	2,080,635.71
1910.....	377,694.27	17,262.86	150,153.11	20,141.87	2,726,650.04
1911.....	379,698.89	14,657.90	38,383.59	21,173.76	2,667,175.90
1912.....	442,336.29	14,658.02	187,974.95	25,420.95	3,173,644.90
1913.....	442,094.39	11,158.27	19,421.54	30,909.13	3,256,574.58
1914.....	116,162.54	25,728.79	30,634.00	30,385.34	2,898,447.70
1915.....	165,524.72	9,640.85	53,543.58	30,168.92	3,108,785.52
1916.....	268,369.85	15,107.43	171,303.05	33,321.18	3,927,366.30
1917.....	367,920.35	14,706.43	19,852.44	38,357.87	4,411,067.11
1918.....	343,121.14	12,181.75	76,676.75	48,718.70	5,238,452.13
1919.....	283,281.75	16,175.54	44,777.82	58,066.53	5,735,845.70

¹ For purposes of comparison, the real and personal property and income taxes for 1906 should be about one-third less, as they include an extra half-year's taxes.

² Including penalties, costs and interest.

³ Except on income taxes.

Assessments of real and personal property, by fiscal years since organization of Territorial government.

Fiscal year.	Real property	Personal property.	Total.
1901.....	\$58,547,860	\$62,625,038	\$121,172,928
1902.....	60,591,587	62,319,216	122,910,803
1903.....	66,137,075	63,675,607	129,812,682
1904.....	63,516,979	60,381,525	123,898,504
1905.....	67,509,036	66,415,064	133,924,100
1906.....	66,908,337	64,266,678	131,175,015
1907.....	64,901,609	66,149,614	131,051,223
1908.....	66,936,032	65,354,150	132,290,182
1909.....	68,440,615	70,470,205	138,910,820
1910.....	75,792,523	74,475,944	150,268,467
1911.....	77,887,826	76,696,206	154,584,032
1912.....	90,889,067	85,945,744	176,834,801
1913.....	93,853,810	81,347,351	175,201,161
1914.....	91,050,895	70,136,331	161,187,226
1915.....	99,186,323	77,414,899	176,601,222
1916.....	113,922,014	93,048,215	206,970,229
1917.....	129,340,001	102,580,918	231,920,919
1918.....	134,543,320	101,107,647	235,650,967
1919.....	139,893,251	110,631,095	250,524,346

Tax rates.

Year.	First division, city and county of Honolulu.	Second division, counties of Maui and Molokai.	Third division, county of Hawaii.	Fourth division, county of Kauai.
1912.....	1.10	1.15	1.18	1.16
1913.....	1.115	1.10	1.23	1.16
1914.....	1.17	1.29	1.38	1.26
1915.....	1.265	1.44	1.5225	1.385
1916.....	1.273	1.332	1.42	1.415
1917.....	1.21	1.26	1.30	1.35
1918.....	1.83	1.50	1.865	1.81
1919.....	1.83	1.74	1.83	1.788

Assessable values of real and personal property by taxation divisions, since organization of Territorial Government.

Year.	First division, city and county of Honolulu.		Second division, county of Maui.	
	Real property.	Personal property.	Real property.	Personal property.
1901.....	\$31,606,490	\$32,851,799	\$10,620,086	\$5,178,457
1902.....	32,648,863	23,233,053	10,672,459	5,230,831
1903.....	34,553,304	38,547,182	10,039,514	5,389,519
1904.....	32,133,096	37,451,555	11,046,619	5,419,616
1905.....	31,625,579	38,640,381	13,751,078	6,967,738
1906.....	31,640,862	36,792,873	13,751,567	7,375,191
1907.....	31,477,133	36,738,416	12,377,062	9,688,625
1908.....	31,159,916	36,072,436	14,045,727	8,258,132
1909.....	32,292,558	38,259,171	13,585,341	10,799,789
1910.....	34,367,440	41,126,130	17,775,146	10,296,519
1911.....	35,643,725	41,498,709	18,216,628	11,638,201
1912.....	40,448,503	43,977,046	21,458,927	13,142,716
1913.....	46,589,481	41,998,665	18,328,556	12,820,899
1914.....	49,540,725	39,234,877	16,142,677	9,505,264
1915.....	53,574,831	40,989,573	18,278,238	11,471,742
1916.....	57,957,035	43,832,979	20,911,553	16,615,697
1917.....	66,528,200	49,075,650	24,245,993	19,467,187
1918.....	70,246,305	49,381,175	23,869,365	16,428,894
1919.....	72,813,165	54,350,140	24,187,930	17,819,255

Assessable values of real and personal property by taxation divisions, since organization of Territorial Government—Continued.

Year.	Third division, county of Hawaii.		Fourth division, county of Kauai.		Total.
	Real property.	Personal property.	Real property.	Personal property.	
1901.....	\$11,355,972	\$16,098,569	\$4,965,342	\$8,496,213	\$121,172,928
1902.....	11,408,353	16,150,943	5,017,715	8,548,587	122,910,803
1903.....	16,135,131	13,242,340	5,409,126	6,396,566	129,812,682
1904.....	14,916,291	11,833,177	5,421,043	5,677,177	123,898,504
1905.....	15,179,975	12,640,727	6,952,404	8,166,218	133,924,100
1906.....	14,948,462	12,036,906	5,567,446	8,061,708	131,175,015
1907.....	14,410,434	11,759,984	6,636,980	7,962,589	131,051,223
1908.....	15,234,369	12,590,260	6,496,020	8,433,322	132,290,182
1909.....	15,908,203	13,164,880	6,654,513	8,246,365	138,910,820
1910.....	16,831,448	14,097,093	6,818,489	8,956,302	160,268,467
1911.....	16,751,660	14,117,085	7,375,813	9,442,211	154,584,032
1912.....	20,701,679	18,384,458	8,290,048	10,441,524	176,834,801
1913.....	20,303,521	17,180,835	8,632,252	9,346,952	175,201,161
1914.....	17,484,322	13,754,966	7,883,171	7,641,224	161,187,226
1915.....	19,108,813	15,331,548	8,224,441	9,622,036	176,601,232
1916.....	24,973,421	20,521,689	10,080,005	12,077,850	206,970,229
1917.....	27,945,858	22,238,663	10,619,960	11,799,418	231,920,919
1918.....	29,633,360	23,807,933	10,794,290	11,489,645	235,650,967
1919.....	31,955,951	25,803,665	10,936,205	12,658,035	250,524,346

Assessed value of real and personal property for 1919, by taxation divisions.

Taxation division.	Real property.	Personal property.	Total, 1919.	Total, 1918.	Per cent increase, 1919.
First, city and county of Honolulu.....	\$72,913,165	\$54,350,140	\$127,163,305	\$119,627,480	6.30
Second, county of Maui.....	24,187,930	17,819,255	42,007,185	40,298,259	4.24
Third, county of Hawaii.....	31,955,951	25,803,665	57,759,616	53,441,293	8.08
Fourth, county of Kauai.....	10,936,205	12,658,035	23,594,240	22,283,985	5.88
Total for the Territory.....	139,993,251	110,631,095	250,524,346	235,650,967	6.81

Assessed value of real and personal property for 1919, by races, etc., of taxpayers.

Taxpayers.	Real property.		Personal property.		Total assessed value.	Per- centage.
	Number taxpayers	Assessed value.	Number taxpayers	Assessed value.		
Corporations, firms, etc.....	783	\$88,909,410	1,023	\$96,715,185	\$185,624,595	74.09
Anglo-Saxons.....	3,312	26,656,188	3,499	4,723,276	31,379,464	12.53
Hawaiians.....	5,878	12,670,508	1,913	1,984,609	15,655,117	6.23
Chinese.....	1,631	3,140,306	1,367	1,656,250	4,796,555	1.91
Portuguese and Spanish.....	2,665	5,619,076	1,622	917,411	6,536,487	2.61
Japanese.....	1,183	1,997,764	3,461	4,684,364	6,582,128	2.63
Total.....	15,452	139,993,251	12,885	110,631,095	250,524,346	100.00

Cost of assessing and collecting taxes, years ended June 30.¹

Fiscal year.	Actual cost.	Percent- age of amount collected.	Fiscal year.	Actual cost.	Percent- age of amount collected.
1901.....	\$54,996.06	4.52	1911.....	\$63,516.59	2.44
1902.....	63,900.33	3.81	1912.....	73,520.67	2.48
1903.....	70,194.46	4.25	1913.....	78,066.02	2.44
1904.....	71,362.16	4.24	1914.....	81,352.68	2.86
1905.....	59,665.71	3.66	1915.....	89,789.99	2.97
1906.....	73,350.92	2.83	1916.....	85,490.08	2.29
1907.....	66,711.41	3.78	1917.....	92,719.92	2.12
1908.....	67,160.18	3.64	1918.....	94,111.53	1.84
1909.....	62,768.42	3.08	1919.....	111,161.07	1.96
1910.....	65,532.11	2.66			

¹ Not including inheritance and insurance taxes.² For purposes of comparison, 3.81 should be used instead of 2.83.

Sources and distribution of all revenues in the Territory and the counties, fiscal year ended June 30, 1919.

Distribution.	Collected by the Territory.					
	General property taxes.	Specific property taxes.	Income taxes.	Personal taxes.	Inheritance taxes.	Insurance taxes.
Territory: General fund.....	\$55,530.30	.....	\$908,355.51	.....	\$44,777.82	\$58,066.53
Territory as agent for counties:						
Assessing and collecting taxes.....	102,180.00	.....			
Interest and sinking fund.....	171,750.55	.....			
Pay of teachers, Act 234, S. L. 1917.....	25,000.00	.....			
Schools:						
General support under Territory.....	1,026,979.45	.....		\$113,213.17		
Buildings and grounds under counties.....	875,100.00	.....			
Counties: General fund.....	2,522,784.22	\$6,553.70		56,622.35		
Roads.....		\$18,932.10				
Total.....	4,276,324.52	\$25,485.80	908,355.51	169,835.52	44,777.82	58,066.53

Distribution.	Collected by the Territory.	Collected by the counties.				Total.
	Miscellaneous revenues.	License fees.	Fines and costs.	Water and sewer rates.	Miscellaneous revenues.	
Territory: General fund...	\$1,075,535.92	.....				\$2,142,266.08
Territory as agent for counties:						
Assessing and collecting taxes.....						102,180.00
Interest and sinking fund.....						171,750.55
Pay of teachers, Act 234, S. L. 1917.....						25,000.00
Schools:						
General support under Territory.....						1,140,192.62
Buildings and grounds under counties.....						875,100.00
Counties: General fund.....		\$205,877.17	\$109,137.51	\$293,644.91	\$506,277.12	3,699,896.98
Roads.....						\$18,932.10
Total.....	1,075,535.92	205,877.17	109,137.51	293,644.91	506,277.12	7,975,318.23

CORPORATIONS.

During the last fiscal year a total of 79 corporations were created and 18 dissolved, as follows:

	Created.	Dissolved.
Mercantile.....	56	14
Agricultural.....	6	4
Bank.....	1	
Savings and loan.....	2	
Eleemosynary.....	14	
Total.....	79	18

Leaving at the close of the year 853 domestic corporations, an increase of 61 in all. The total capitalization of domestic corporations other than eleemosynary, etc., is \$175,676,553, an increase of

\$4,292,610, or 2.50 per cent for the year. Foreign corporations to the number of 152, as compared with 144 of the preceding year, are authorized to do business in the Territory. The classes, number, and capitalization of the domestic corporations now in existence incorporated before and after the transfer of sovereignty to the United States are as follows:

Hawaiian corporations.

	Number.			Capital.		
	Incorporated before Aug. 12, 1898.	Incorporated since Aug. 12, 1898.	Total.	Incorporated before Aug. 12, 1898.	Incorporated after Aug. 12, 1898.	Total.
Agricultural.....	45	110	155	\$47,866,750	\$36,038,515	\$83,905,265
Mercantile.....	37	438	475	16,141,125	50,680,203	66,821,328
Railroad.....	5	4	9	7,370,000	7,139,980	14,509,980
Street car.....		2	2		1,950,000	1,950,000
Steamship.....	1	1	2	3,000,000	6,000	3,006,000
Bank.....	1	7	8	600,000	2,750,000	3,350,000
Savings and loan.....		15	15		838,000	838,000
Trust.....	1	6	7	200,000	900,000	1,100,000
Insurance.....		2	2		200,000	200,000
Eleemosynary.....	34	144	178			
Total.....	124	729	853	75,177,875	100,498,678	175,676,553

Income taxes ¹ collected for the year ended June 30, 1919, by races, etc., of taxpayers.

Taxpayers.	General income.		Special income.		Total.	Percentage.
	Number taxpayers.	Amount collected.	Number taxpayers.	Amount collected.		
Corporations, firms, etc.....	405	\$499,624.57	399	\$260,988.06	\$760,612.63	83.88
Anglo-Saxons.....	2,781	98,834.04	446	17,478.63	116,312.67	12.83
Hawaiians.....	259	13,633.67	22	3,116.35	16,750.02	1.85
Japanese.....	145	3,104.66	14	445.85	3,550.51	.39
Portuguese and Spanish.....	275	5,411.36	21	777.15	6,188.51	.68
Chinese.....	138	3,006.34	14	895.10	3,400.44	.37
Total.....	4,003	623,613.64	916	283,200.64	906,814.28	100.00

¹ Exclusive of interest, penalties, and costs.

BANKS.

Twenty-six banks were in operation during the year. These were distributed as follows: Nine in Honolulu, two at Waialua and one each at Schofield and Waipahu, on the island of Oahu; three at Hilo, two at North Kona and one each at Honokaa and North Kohala, on the island of Hawaii; one each at Wailuku, Kahului, Paia and Lahaina, on the island of Maui; and one each at Lihue and Waimea, on the island of Kauai. Three are national banks, namely, one at Honolulu, one at Schofield, and one on the island of Maui. One of the banks is solely a savings bank, two are solely commercial, and the remainder are both commercial and savings banks.

Deposits in banks since organization of Territorial government.

Fiscal years.	Number of banks.	Commerical deposits Dec. 31.	Savings deposits June 30.	Total.
1901.....	8	\$3,857,413.16	\$804,718.01	\$1,662,131.17
1902.....	9	4,094,919.90	1,073,581.56	5,168,501.46
1903.....	9	3,694,965.00	1,102,707.24	4,797,672.24
1904.....	9	4,159,078.89	1,372,157.00	5,531,235.89
1905.....	9	3,993,052.90	1,695,326.78	5,688,379.66
1906.....	9	5,022,495.26	2,527,943.98	7,550,439.22
1907.....	11	4,966,042.04	2,777,554.40	7,743,596.44
1908.....	11	5,074,836.16	2,588,722.87	7,663,559.03
1909.....	11	6,334,991.42	3,322,827.79	9,657,819.21
1910.....	11	9,033,385.97	4,290,919.57	13,324,305.54
1911.....	16	10,289,707.89	5,020,555.62	15,310,263.51
1912.....	17	12,667,162.39	5,521,973.11	18,189,135.50
1913.....	17	11,641,901.30	5,384,395.72	17,026,297.02
1914.....	18	10,381,874.60	6,275,700.63	16,647,665.23
1915.....	19	12,378,041.53	7,736,569.32	20,114,610.85
1916.....	19	17,317,339.40	9,061,910.28	26,379,249.68
1917.....	22	22,486,524.31	10,205,496.70	32,692,021.01
1918.....	23	24,620,004.80	9,892,708.08	34,512,712.88
1919.....	26	24,898,287.81	10,450,846.55	35,349,134.36

Savings bank accounts, by races, June 30, 1919.

Races.	Population 1918.		Accounts.			Deposits.	
	Esti- mated.	Per cent.	Number.	Per cent.	Average.	Total.	Per cent.
Japanese.....	106,800	41.69	12,889	30.89	\$131.91	\$1,700,196.39	16.27
Chinese.....	22,250	8.68	3,537	8.48	284.12	1,004,963.25	9.62
Hawaiians.....	38,950	15.20	5,927	14.20	91.76	543,836.11	5.20
Portuguese.....	24,250	9.47	4,859	11.63	359.39	1,746,293.70	16.71
All others.....	63,930	24.96	14,522	34.80	375.68	5,455,657.04	52.20
Total.....	256,180	100.00	41,734	100.00	250.41	10,450,846.55	100.00

Comparative statement of fire insurance business transacted in the Territory of Hawaii for the calendar years 1903-1918, inclusive.

Year.	Insurance written.	Premiums.	Losses, claims, etc., paid.	Percent- age loss to amount insured.	Loss paid for each \$100 premium.
1903.....	\$19,888,471.92	\$364,628.51	\$153,261.17	0.0077	\$42.00
1904.....	20,374,737.27	364,947.07	96,215.63	.0047	26.30
1905.....	22,359,559.00	377,762.00	28,456.00	.0012	7.53
1906.....	21,928,280.95	399,913.91	166,249.64	.0075	42.63
1907.....	23,270,292.95	442,361.19	37,512.67	.0016	8.50
1908.....	25,214,465.13	445,066.44	39,096.52	.0015	8.80
1909.....	25,239,095.86	489,361.49	10,259.71	.0004	2.09
1910.....	24,343,503.77	508,262.80	69,778.62	.0028	13.70
1911.....	26,527,407.86	549,456.92	95,494.35	.0036	17.38
1912.....	27,131,432.65	585,292.56	47,781.56	.0017	8.16
1913.....	28,385,448.72	567,821.25	87,630.79	.0030	15.43
1914.....	29,632,953.11	558,888.90	64,762.95	.0021	11.58
1915.....	36,014,438.62	602,634.14	82,171.21	.0023	13.58
1916.....	39,784,264.66	662,232.98	53,217.44	.0013	7.66
1917.....	48,508,089.66	857,887.65	41,714.87	.0008	4.86
1918.....	55,275,642.15	932,259.59	50,702.58	.0009	5.44
Total.....	473,878,084.24	8,728,797.40	1,124,306.71	.0024	12.88

¹ Average.

Recapitulation of insurance business transacted in the Territory of Hawaii for 1918.

Class.	Insurance written.	Premiums.	Renewal premiums.	Losses, claims, etc., paid.
Fire.....	\$55,275,642.15	\$932,259.59	.....	\$50,762.58
Marine.....	137,315,503.90	594,739.37	.....	50,833.44
Life.....	5,271,700.40	268,290.20	\$1,091,505.19	526,094.31
Accident and health.....	.....	99,126.64	.....	22,450.88
Automobile.....	.....	80,886.37	.....	10,042.67
Burglary.....	.....	909.04	.....	.....
Employers' liability.....	.....	11,687.86	.....	746.70
Fidelity and surety.....	.....	52,871.02	.....	3,474.44
Plate glass.....	.....	3,805.20	.....	2,142.31
Package.....	.....	170.00	.....	.....
Property damage.....	.....	7,452.96	.....	1,039.86
Live stock.....	.....	60.00	.....	75.00
Tourist.....	.....	45.50	.....	.....
Workmen's compensation.....	.....	166,499.77	.....	57,010.49
Total.....	197,862,846.45	2,188,803.52	1,091,505.19	725,212.68
Total in 1917.....	197,183,383.00	1,985,253.96	869,860.19	560,266.84
Increase in 1918.....	674,463.45	203,549.56	221,645.00	134,945.84

COMMERCE.

Imports and exports, by fiscal years, since organization of Territorial government.

Years.	Imports.			Exports.			Total imports and exports.
	United States. ¹	Foreign countries.	Total.	United States.	Foreign countries.	Total.	
1901.....	(?)	\$2,826,633	\$2,826,633	\$27,935,385	\$117,958	\$28,053,343	\$30,880,476
1902.....	(?)	3,036,583	3,036,583	24,790,060	63,547	24,793,607	27,830,190
1903.....	\$12,675,026	3,142,013	15,817,039	26,242,969	32,569	26,275,438	42,092,477
1904.....	11,987,060	3,797,041	15,784,091	25,157,255	47,020	25,204,275	40,989,566
1905.....	11,703,519	3,011,964	14,715,483	36,114,985	59,541	36,174,526	50,893,009
1906.....	13,224,540	3,275,242	16,499,806	26,884,210	56,313	26,940,523	43,440,331
1907.....	14,225,210	4,151,709	18,376,919	29,134,467	229,914	29,364,381	47,741,300
1908.....	15,303,325	4,682,999	19,986,324	41,640,315	597,040	42,238,355	62,224,179
1909.....	17,391,406	4,033,574	21,424,980	40,437,362	84,152	40,521,514	61,946,484
1910.....	20,531,913	4,606,334	25,138,247	46,133,949	302,763	46,436,712	71,624,559
1911.....	22,322,121	5,190,449	27,512,570	41,207,941	730,442	41,938,383	69,451,133
1912.....	23,006,878	5,598,444	28,604,322	55,076,165	373,273	55,449,438	84,113,760
1913.....	29,129,409	6,873,331	36,002,940	42,713,294	738,046	43,451,340	79,474,880
1914.....	29,247,690	6,282,558	35,550,257	40,678,827	915,245	41,594,072	77,144,329
1915.....	20,348,832	5,716,023	26,064,855	62,306,507	61,849	62,368,356	88,433,211
1916.....	28,029,681	6,068,629	34,098,310	64,445,631	225,221	64,670,852	98,769,062
1917.....	39,875,390	6,482,051	46,358,341	74,480,119	635,864	75,115,983	121,474,324
1918.....	45,004,156	6,797,048	51,801,204	76,395,388	1,151,218	77,546,606	132,347,810
1919.....	42,421,474	8,322,319	50,743,793	82,409,114	5,840,907	88,250,021	138,993,814
Total.....	306,536,655	93,898,944	400,435,599	867,174,533	12,284,882	879,459,415	1,309,895,014

¹ These figures include specie prior to 1903 but since that year most of the specie has been handled through the post office by registered mail, and the amount thereof is not included in this table. During the last fiscal year the shipments of gold and silver coin other than those made through the mails were: From the United States, \$242,000; from foreign countries, nothing; to the United States, \$2,000; to foreign countries, \$3,410.

² Not kept.

Imports and exports by countries.¹

Countries.	Imports.		Exports.	
	1918	1919	1918	1919
Australia.....	\$118,448	\$138,289	\$20,284	\$36,141
Other British Oceania.....	71,974	67,914	161,923	106,720
British India.....	824,512	1,372,469	.....	.....
Canada.....	345,340	431,760	88,856	3,975,849
Chile.....	1,001,089	871,328	.....	.....
France.....	4,304	1,822	.....	.....
Germany.....	6,064	1,535	.....	.....
Hongkong.....	385,011	465,209	11,125	7,485
Japan.....	3,672,468	4,558,499	626,624	548,758
United Kingdom.....	68,991	47,095	196	1,114
Other foreign.....	.....	366,404	242,210	164,840
Total foreign.....	6,797,048	8,322,319	1,151,218	5,840,907
United States.....	45,004,156	42,421,474	79,395,388	82,409,114
Grand total.....	51,801,204	50,743,793	80,546,606	88,250,021

¹ For fiscal years ending Mar. 31.*Domestic exports, by articles, fiscal years 1918 and 1919.*

Articles.	United States, 1919.		Foreign, 1919. ¹	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>		<i>Pounds.</i>	
Sugar.....	1,097,540,707	\$64,557,857	70,054,101	\$3,939,432
Coffee: Raw.....	6,417,524	1,005,342	1,221,696	180,806
Fruits and nuts ².....	.....	12,055,579	.....	60,765
Rice.....	1,497,020	181,594	4,900	356
Hides.....	1,643,515	337,611	.....	.....
Other.....	.....	3,969,407	.....	1,654,476
Total.....	.....	82,065,390	.....	5,835,835

Articles.	Total, 1919.		Total, 1918.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>		<i>Pounds.</i>	
Sugar.....	1,167,594,808	\$68,497,289	1,080,923,593	\$64,109,967
Coffee: Raw.....	7,639,220	1,184,148	3,206,022	466,689
Fruits and nuts ².....	.....	12,116,344	.....	8,640,838
Rice.....	1,501,920	131,950	1,247,731	84,813
Hides.....	1,643,515	337,611	1,734,319	398,719
Other.....	.....	5,622,883	.....	6,786,516
Total.....	.....	87,891,225	.....	80,437,542

¹ For fiscal years ending Mar. 31.² Mostly pineapples.*Customs receipts, fiscal years since organization of Territorial government.*

Fiscal year.	Amount.	Fiscal year.	Amount.
1900 (half of June).....	\$45,523.99	1911.....	1,654,761.34
1901.....	1,219,618.93	1912.....	1,643,197.37
1902.....	1,327,518.23	1913.....	1,809,513.89
1903.....	1,193,677.88	1914.....	1,184,416.12
1904.....	1,229,492.15	1915.....	1,019,534.63
1905.....	1,048,494.40	1916.....	1,161,051.12
1906.....	1,218,764.13	1917.....	1,166,084.80
1907.....	1,458,843.48	1918.....	1,009,243.48
1908.....	1,550,157.32	1919.....	858,268.25
1909.....	1,396,379.91	Total.....	24,827,863.83
1910.....	1,875,319.15		

Arrivals and departures of vessels at ports in Territory of Hawaii during last five years.

Fiscal year.	Number of vessels.	Gross tonnage.
1915.....	868	5,099,783
1916.....	837	4,881,713
1917.....	850	4,388,007
1918.....	796	3,800,949
1919.....	893	3,460,205

Vessels, by ports, fiscal year 1919.

Ports.	Gross tonnage.	Number of vessels.
Honolulu.....	2,885,213	716
Hilo.....	266,914	88
Kahului.....	231,661	62
Port Allen.....	74,417	27
Total.....	3,460,205	893

PORT ACCOMMODATIONS.

The importance of Hawaii as a stopping place for vessels crossing the Pacific Ocean is coming to be more and more recognized, as shown by a rapid increase in the number of such vessels that call at island ports. In my message to the legislature last February, I pointed out the need of appropriations to increase shipping facilities in Hawaii.

More than \$2,500,000 was appropriated during this session for wharf and harbor work. Most of this work will be the construction of new wharves, the dredging of harbors, and the acquisition of property to enlarge port accommodations.

The Federal Government, through the United States Engineers Service, carries on extensive work in the islands toward harbor improvements. During the last year the breakwaters at Hilo and Kahului Harbors have been completed. Dredging is now being done at Kahului Harbor and a contract is shortly to be let for dredging over a considerable area in Honolulu Harbor, near Quarantine Island, and in Kalihi Channel.

The Inter-Island Steam Navigation Co. (Ltd.), has three large piers for the berthing of vessels, two automatic conveyors for discharging and storing cargoes of coal, two automatic conveyor barges for bunkering vessels, three floating drydocks for docking and repairing vessels, and oil pipe lines for handling cargoes of bulk fuel oil. Pier "A," of this company, which was completed some months ago, is more than 600 feet in length. It was built primarily to accommodate the coal handling mechanism. It is a massive structure, entirely of reinforced concrete. Pier "B" has just been completed. It is also of concrete and is 700 feet long with a clear deck width of 30 feet. Pier "C", which will adjoin Pier "B," will be built in the near future. Slip No. 1, located between Piers A and B, is 850 feet long and 180 feet wide, and has a depth of 32 feet at low low water. Ship No. 2 is 950 feet long and 165 feet wide for about one-half its length, and 230 feet wide at the remaining portion. It has a depth of 35 feet at low low water, except at the site of the proposed floating drydock, where it is 45 feet deep.

The company's new coaling plant, No. 2, which has been in operation for several months, is constructed entirely of steel and is operated by electricity. It has a discharge capacity of approximately 2,000 tons per nine hours. This plant is located on the west half of the harbor. Coal conveyor No. 1, on the east side of the harbor, has the same discharge capacity. In connection with these two conveyors is storage room for 100,000 tons of coal.

Floating drydock No. 1 is 325 feet long and has a lifting capacity of 4,500 tons. No. 2 is 165 feet long, with a capacity of 3,500 tons. No. 3 is for small craft only, its capacity being 150 tons.

It is interesting to note that the United States Shipping Board steamer *West Hardaway*, which is 410 feet in length, 54 feet beam, 30.2 feet depth, was recently raised clear on the first-named drydock, enabling repairs to be made along the entire bottom of the vessel.

The United States Army transport *Dix*, about 7,000 tons, with 5,000 tons of cargo on board, making a total of more than 12,000 tons, was handled on the same dock in order to replace tail shaft and propeller.

The company reports that consideration is being given to other facilities which will undoubtedly help to make the port of Honolulu more attractive. In arranging these it will be the purpose to give vessels the greatest dispatch possible, this being the main factor in handling vessels which call at this port.

TRANSPORTATION FACILITIES.

Serious congestion in passenger travel and frequent long waits in freight and mail accommodations have continued during the year, owing to a number of large vessels having been in war service in the Atlantic Ocean. Long lists of persons desiring to go to the mainland have crowded the books of the steamship companies for months ahead of sailing dates and hundreds of persons have been unable to secure transportation.

The situation will undoubtedly grow better within a few months, and the increase of commerce on the Pacific Ocean will send a larger number of vessels to Hawaiian ports.

TRAFFIC WITH THE MAINLAND.

The Matson Navigation Co. operates the *Manoa*, *Sachem*, and *Lurline* of 6,805 tons, 3,130 tons, and 5,928 tons, respectively, between San Francisco and Honolulu and the *Enterprise*, 2,675 tons, between San Francisco and Hilo.

Three big steamers of this company, the *Maui*, *Matsonia*, and *Wilhelmina* of 10,261 tons, 9,728 tons, and 6,974 tons, respectively, were operated by the United States Government in the war zone and are still retained for Government purposes. The *Lurline* and *Manoa* made three voyages to Manila during the year, calling at Honolulu both ways.

In the freight trade the *Hyades*, 3,753 tons, and the *Annie Johnson*, power schooner, 1,049 tons, were recently returned to island traffic after having been requisitioned by the Federal Shipping Board between October, 1918, and April, 1919. Sundry freight vessels of American and Danish registry are consigned to this company, and

all have taken cargoes of sugar or canned pineapples on their return voyages to San Francisco or Atlantic ports. The company has recently instituted a Seattle-Honolulu-San Francisco triangular freight service with four steamers which were built for the United States Shipping Board. It is anticipated that when this line is fully established there will be a sailing every 10 days from Seattle.

The American Hawaiian Steamship Co., which has been in the island trade since January, 1901, has operated during the year 1919 a number of Shipping Board vessels allotted to it in place of its regular vessels, all of which had been requisitioned by the Government for war work and placed in service on the Atlantic Ocean. This substitute fleet has transported approximately 185,000 tons of sugar during 1919 from Hawaiian Island ports to Atlantic ports via the Panama Canal. As the Government will probably soon release the regular fleet, it is anticipated that the regular service between New York and the Hawaiian Islands via the canal will be resumed during the early part of 1920.

THROUGH SERVICE.

The China Mail Steamship Co. operated the steamers *China* and *Nanking* between San Francisco and oriental ports, carrying first, second, and third class passengers to and from Honolulu. Early in May, 1919, the *Nanking* was requisitioned by the Federal Government for war purposes, and it is not the intention of the owners to have this vessel call at Honolulu when returned to private operation.

The Pacific Mail Steamship Co. has continued to operate the *Ecuador*, *Venezuela*, and *Colombia*, vessels of 14,000 tons each, between San Francisco and oriental ports with stop-overs at Honolulu both ways. In addition, the company has a Manila-East India service with two 16,000-ton passenger and freight steamers, the *Santa Cruz* and *Colusa*, which also stop regularly at Honolulu on the homeward voyage.

The Toyo Kisen Kaisha is again operating its full fleet of steamers, consisting of the *Shinyo Maru* and *Tenyo Maru*, of 22,000 tons each, the *Siberia Maru* and *Korea Maru*, of 20,000 tons each, the *Nippon Maru*, of 14,000 tons, and the *Persia Maru*, of 9,000 tons. These vessels are on the run between China, Japan, Honolulu, and San Francisco, while the *Anyo Maru*, of 18,500 tons, the *Kiyo Maru*, of 17,200 tons, and the *Seiyo Maru*, of 14,000 tons, are on a run including China, Japan, Honolulu, San Francisco, Mexico, Panama, and South America. These three vessels call at Hilo after leaving Honolulu on the outward trip from Japan. The *Persia Maru* and *Seiyo Maru* were recently returned to the company by the United States Government after seeing considerable service in the Atlantic war zone. With the return of the *Seiyo Maru* to the South American service the *Nippon Maru* was again placed on her regular run between San Francisco and the Orient.

The Oceanic Steamship Co. is operating the two passenger steamers *Sonoma* and *Ventura*, 6,200 tons each, and the freight steamer *Jacox*, 3,500 tons, on the run between San Francisco and Sydney, by way of Honolulu and Pago Pago. *Sonoma* and *Ventura* touch at each point every four or five weeks. The *Jacox* makes the round trip every three months.

The Canadian-Australasian Royal Mail Line has the *Niagara* and *Makura*, 13,500 and 8,075 tons, on the Sydney-Vancouver run. Steamers sail from Honolulu north about every 28 days. It is stated that the *Makura* will eventually be removed and another steamer, probably a trifle larger than the *Niagara*, put in her place. The trip from Sydney to Vancouver and return requires 36 days, including a stop of five days at Vancouver.

The Standard Oil Co. operates a fleet of five steamers between the mainland and the Territory. These vessels delivered during the calendar year 1918 a total of 495,080 barrels of fuel and refined oils and 26,433 cases and 989 barrels of lubricating and refined oils.

The Associated Oil Co. operates four vessels and during the fiscal year these delivered 477,802.27 barrels of fuel oil.

The Union Oil Co. of California, which operates four steamers, received during the fiscal year 53,332.94 barrels of fuel oil.

A number of sailing vessels continue to bring general merchandise and coal from foreign ports.

INTERISLAND TRAFFIC.

Most of the interisland traffic is conducted by the Inter Island Steam Navigation Co. (Ltd.), which operates a fleet of 12 steamers, varying in length from 136.1 feet to 252 feet and from 11.5 to 18 feet draft; from 341 to 1,566 gross tons and from 201 to 940 net tons. The total tonnage is 8,987 gross and 5,834 net.

During the fiscal year this company carried 81,803 passengers and 400,030 tons of freight, which is a decrease of 8,395 passengers and a decrease of 2,115 tons of freight as compared with the previous period.

The Oahu Shipping Co. operates a fleet of six motor vessels with a gross tonnage of 569 tons, two seagoing barges, and an oil vessel. During 1918 this company carried 66,670 tons of freight between island ports. No passengers are carried.

STEAM RAILROADS.

Islands.	Number.	Track.	Increase.	Gauge.	Rolling stock.		
					Locomotives.	Passenger cars.	Freight cars.
Oahu ¹	2	<i>Miles.</i> 125.84	0.76	<i>Ft. in.</i> 3 0 3 0 4 8 3 0 3 0 2 6	26	51	707
Hawaii.....	3	115.00			16	18	264
Maul.....	1	42.11	.83		9	6	173
Kauai.....	1	19.22			1		20
Total.....	7	302.17	1.59		52	75	1,173

Islands.	Freight carried.	Passengers carried.	Bonds outstanding.	Rate of interest.	Capital stock.
	<i>Tons.</i>			<i>Per cent.</i>	
Oahu.....	923,502	1,592,440	\$2,000,000	5	\$5,150,000
Hawaii.....	205,886	430,688	2,350,000	5	4,114,960
Maul.....	315,657	115,806			300,000
Kauai.....	13,854		348,000	6	500,000
Total.....	1,458,849	2,139,024	4,698,000		10,064,960

¹ Figures from Oahu on freight and passengers carried are for the Oahu Railway & Land Co. During the calendar year 1918 the Koolau Railway Co. carried 4,775 passengers and 22,347 tons of freight.

PRIVATE (PLANTATION) RAILWAYS.

Island.	Number.	Track.	Increase.	Locomotives.	Passenger cars.	Freight cars.
Oahu.....	9	201.00	3.25	33	18	2,792
Hawaii.....	11	111.54	.50	29	2	1,503
Maui.....	5	146.26	2.00	20	1	2,663
Kauai.....	10	208.76	.....	38	9	3,091
Total.....	35	667.56	5.75	120	30	10,055
Grand total.....	42	969.73	7.34	172	105	11,228

STREET RAILROADS.

The Honolulu Rapid Transit & Land Co. controls and operates the only street railway system in this Territory. It is an electric line, partly single and partly double track.

During the year the company expended for betterment of the system \$95,411.47. Outstanding capital stock is \$2,000,000. Gross income for the calendar year of 1918 was \$735,151.14, an increase of \$8,547.74 over that of the preceding year. Disbursements were \$814,736.71, an increase of \$41,744.93. The number of fare passengers was 14,304,489, a decrease of 73,603 from the previous year. The number of free passengers carried, principally policemen, letter-carriers, firemen, and employees, was 177,219, a decrease of 14,083. School children are carried at half rate. The car mileage was 2,069,359.61.

LIGHTHOUSES.

Honolulu is headquarters of the Nineteenth lighthouse district, embracing all of the islands of the Territory of Hawaii and certain other islands in the Pacific Ocean.

There are in commission one hyperradiant light, two second-order one third-order, three fourth-order, and two fifth-order lights, 10 lens-lantern oil lights, 22 automatic acetylene lights, six electric lights, seven automatic acetylene lighted buoys, and the lighthouse tender *Kukui*.

During the year an electric light was established at the intersection of piers 9 and 10, Honolulu Harbor. The private range lights maintained by the Territorial harbor commission at Kihei, Maui, were discontinued. Plans have been approved for a system of electric and gas lights in Pearl Harbor, for which Congress has appropriated \$80,000. Construction work will commence soon. Plans are also underway for the establishment of an automatic acetylene light at Kaena Point, Oahu.

TELEGRAPHS AND TELEPHONES.

In addition to the cable system across the Pacific Ocean, which has been in operation a number of years, there are three wireless plants, which are either wholly or in part operated by the Government. The Government has also operated the interisland wireless system of the Mutual Telephone Co. of Honolulu since the beginning of the war.

The sending station of the Marconi Wireless Co., which was taken over by the Government upon the day war was declared, was turned back on March 20, 1918, but is being held in readiness to be placed in operation upon short notice. The Marconi sending station at Koko Head was taken over by the Government on January 8, 1918. On August 1, 1919, the Government ceased to operate this station, but is still holding it. It is expected that with the ratification of the peace treaty the company will be put in full charge of both stations, which will then be operated on a duplex system.

The Mutual Telephone Co. operates the principal telephone system on the island of Oahu, and now has in operation 775 instruments, with 43 miles of conduit, 115 miles of cable, and 1,300 miles of open wire in Honolulu alone. Outside of the city it has 1,164 miles of copper wire, 1,675 miles of iron wire, and 777 instruments.

On the island of Hawaii the Hawaii Telephone Co. of Hilo operates 1,521 instruments, with 2,600 miles of open wire. The Kohala Telephone Co. on the same island operates 103 telephones, on 225 miles of wire, and will add 150 miles of wire and several telephones next September.

The Mutual Telephone Co. of Wailuku, Maui, operates 1,059 instruments with 1,812 miles of wire, and the Kauai Telephonic Co. of Lihue, Kauai, has 280 telephones and 495 miles of wire in operation.

POSTAL SERVICE.

A substantial increase in the receipts of the Honolulu post office for the fiscal year ending June 30, 1919, is attributable entirely to the increase in the rates of first-class postage which were effective the greater part of that year. The new figures, nevertheless, speak well for the city of Honolulu and the Territory of Hawaii, inasmuch as they offer conclusive proof that the general business and industry of the Territory has continued notwithstanding the deterring influences of the great war. When tourist travel to Hawaii returns to a normal basis, and the plans of the War and Navy Departments for their larger establishments here are carried out, a large increase of postal revenues and traffic will occur.

Receipts for the fiscal year ending June 30, 1919, including stamp sales, box rents, and second and third class postage, amount to \$227,152.84. During the four preceding fiscal years the corresponding figures were:

1918.....	\$204,553.83
1917.....	176,557.24
1916.....	158,659.10
1915.....	140,219.19

No more interesting evidence of the expansion of Hawaii could be found than these figures.

Of the postal statistics available in Hawaii each year, those showing the sums dispatched to Japan and the Orient through the international money-order service are probably of most interest and importance. Honolulu is the exchange office for the entire Territory and therefore all money-order business of the Territory passes through the Honolulu office. In the year ending June 30, 31,567

money orders, amounting to \$875,497.15, were sold in Hawaii for payment in Japan. This sum, therefore, was remitted to Japan through the postal money-order system. In the fiscal year 1918 there were 35,322 Japanese orders sold, amounting to \$997,528.93; and in the fiscal year 1917 the Japanese business involved 43,042 orders sold, valued at \$1,198,038.30. The post office has no means of knowing whether the decrease is due to the fact that a greater number of Japanese are making their remittances through the Japanese banks as the amounts remitted through the banks are not available. There is every reason for believing, however, that the recent War Savings campaign, which had as one of its main objectives here an endeavor to keep the surplus earnings of aliens at home, has had some success.

The magnitude of the money-order business transacted at the Honolulu post office is shown by the following tables:

Number, amounts, and fees of domestic and international money orders issued at Honolulu, and remittances received from other offices in Hawaii on account of orders issued, fiscal year 1919.

	Number.	Amount.	Fees.	Total.
Domestic money orders issued.....	37,585	\$649,276.40	\$3,470.92	\$652,747.32
International money orders issued.....	4,712	151,210.89	1,725.80	152,936.69
Total.....	42,297	800,487.29	5,196.52	805,683.81

Money-order remittances received from other offices.....	\$2,319,793.60
Miscellaneous.....	12.68
Balance, July 1, 1918.....	8,457.64
Total.....	2,123,946.63

Domestic and international money orders paid at Honolulu post office, fiscal year 1919, and funds remitted to depository.

	Number.	Amount.
Domestic money orders paid.....	60,241	\$1,296,395.25
International money orders paid.....	967	52,282.32
Total.....	61,208	1,348,677.57
Funds remitted to depository.....		1,749,000.00
Funds furnished other offices.....		28,606.00
Miscellaneous.....		22.80
Balance June 30, 1919.....		7,641.16
Total.....		3,133,946.53

Money orders received from foreign countries.

	Number.	Amount.		Number.	Amount.
New South Wales.....	44	\$1,322.75	Apia, Samoa.....	13	\$208.80
Queensland.....	9	60.38	Fanning Island.....	83	4,161.12
Victoria.....	31	663.23	Hongkong, China.....	10	71.27
South Australia.....	6	31.35	Japan.....	284	9,440.65
Western Australia.....	1	12.18			
Tasmania.....	3	40.19	Total.....	617	21,822.39
New Zealand.....	163	5,801.42			

Money orders certified to foreign countries.

	Number.	Amount.		Number.	Amount.
New South Wales.....	166	\$2,797.58	New Zealand.....	126	\$4,814.37
Queensland.....	26	273.57	Hongkong, China.....	33	1,057.35
Victoria.....	54	995.83	Japan.....	31,567	875,497.15
South Australia.....	11	119.87			
Western Australia.....	1	25.00	Total.....	32,005	885,398.54
Tasmania.....	19	207.82			

Probably the most important war service rendered by the post offices in Hawaii had to do with the postal cooperation in the War Savings campaign. Postal men in Hawaii, therefore, are proud of the fact that their labors assisted in making Hawaii's record of achievement in War Service complete. The quota of war stamps for Hawaii of \$2,000,000 maturity value was exceeded during the calendar year 1918 by more than \$52,000. The exact amount of war stamps sales now officially credited to the Territory by the Secretary of the Treasury is \$2,052,366. All the stamps representing this sum, with the exception of \$120,000 worth, were sold through the post offices.

POPULATION, IMMIGRATION, AND LABOR.

See "Schools" for pupils by races, ages, etc., in public and private schools for different years; "Taxation" for amount of taxable property owned and income taxes paid by different races; "Public lands" for homesteads taken by different races; "Banks" for amounts of saving deposits by different races; "Vital statistics" for births, marriages, and deaths; and "Courts" for percentages of convictions among different races.

The estimated population, including that of the Army and Navy, on June 30, 1919, was 263,666, an increase of 70,757, of 36.68 per cent, since the census of 1910. The estimated population of Honolulu, the capital of the Territory, is 78,200.

The following table shows the population by races, as near as can be estimated, as of June 30, 1919.

Estimated population June 30, 1919.

Races.	Census Apr. 15, 1910.	Esti- mated June 30, 1919.	Races.	Census Apr. 15, 1910.	Esti- mated June 30, 1919.
Hawaiian.....	26,041	22,000	Chinese.....	21,674	22,800
Part Hawaiian.....	12,506	16,600	Japanese.....	79,674	110,000
Portuguese.....	23,303	25,000	Filipino.....	.....	22,000
Spanish.....	1,990	2,400	All others.....	7,984	5,806
Porto Rican.....	4,890	5,400			
Other Caucasian.....	14,867	31,000	Total.....	192,909	263,666

Steering arrivals and departures and births and deaths 9 fiscal years since census of April, 1910.

	Hawaiian.	Port. Hawaiian.	Portu- guese.	Spanish.	Porto Rican.	Other Can- casion.	Chinese.	Japanese.	Filipino.	All other.	Total.
Arrivals:											
1911.....	.....	.....	601	908	.....	10	583	2,248	2,209	206	6,765
1912.....	.....	.....	862	911	.....	270	512	3,400	3,038	743	9,837
1913.....	.....	.....	362	2,422	1	96	586	5,015	6,749	856	15,066
1914.....	.....	.....	208	25	.....	137	532	4,862	3,199	689	9,542
1915.....	.....	.....	112	24	7	108	385	3,180	1,244	705	5,760
1916.....	.....	.....	180	4	.....	170	583	4,185	1,752	577	7,441
1917.....	.....	.....	159	15	.....	17	471	4,023	2,832	720	8,543
1918.....	.....	.....	35	1	.....	8	306	3,866	2,676	399	7,321
1919.....	.....	.....	17	.....	.....	18	288	3,932	2,747	413	7,435
Total.....			2,536	4,310	8	839	4,246	34,367	25,546	5,378	77,330
Births:											
1911.....	.....	.....	700	73	233	208	423	1,726	27	46	4,494
1912.....	592	467	754	121	219	224	441	2,021	38	52	5,147
1913.....	646	625	841	170	220	255	489	2,230	92	70	5,568
1914.....	574	627	911	235	216	290	548	2,039	154	69	6,756
1915.....	596	708	883	266	176	315	607	4,406	219	116	8,507
1916.....	533	786	946	255	226	323	655	3,662	251	121	7,899
1917.....	617	833	971	199	191	378	680	4,918	346	168	9,365
1918.....	597	917	1,048	161	237	416	666	4,579	456	214	9,404
1919.....	635	992	1,060	126	249	400	717	4,381	470	301	9,164
Total.....			8,004	1,606	1,976	2,809	5,229	31,172	2,063	1,057	63,304
Grand total.....	5,442	6,956	10,540	5,916	1,964	3,638	9,475	65,739	27,599	6,335	143,494
Departures:											
1911.....	.....	.....	624	.....	223	651	927	3,491	462	399	6,785
1912.....	.....	.....	539	534	13	148	747	3,490	156	739	6,356
1913.....	.....	.....	819	1,079	33	137	813	3,545	344	853	7,783
1914.....	.....	.....	469	754	105	159	728	3,778	693	1,014	8,060
1915.....	.....	.....	469	447	50	171	645	3,449	678	788	6,997
1916.....	.....	.....	474	466	210	10	604	3,068	667	652	6,211
1917.....	.....	.....	367	1,003	41	61	419	3,448	1,130	733	7,202
1918.....	.....	.....	844	588	87	47	396	4,737	1,470	503	8,585
1919.....	.....	.....	226	283	43	137	495	5,199	1,994	34	7,401
Total.....			5,351	5,434	794	1,501	5,767	34,205	6,624	5,705	55,371
Deaths:											
1911.....	.....	.....	394	39	101	171	263	1,060	66	70	3,396
1912.....	.....	.....	344	58	91	168	235	943	59	62	3,071
Total.....	1,010	172	738	95	192	339	498	1,993	125	132	6,464

1913.....	941	178	329	70	67	155	230	1,012	178	72	3,223
1914.....	946	202	346	70	70	204	247	1,246	223	65	3,707
1915.....	888	183	308	52	95	182	276	1,301	209	82	3,584
1916.....	942	275	379	70	107	201	274	1,585	223	75	3,940
1917.....	944	289	277	57	107	210	271	1,246	229	67	3,498
1918.....	883	275	331	42	63	227	331	1,263	244	101	3,010
1919.....	891	280	312	23	74	194	322	1,469	403	98	4,031
Total.....	8,297	1,989	3,005	495	764	1,687	2,429	11,044	1,989	692	32,361
Grand total.....	8,297	1,989	3,356	5,929	1,548	3,188	8,196	45,249	8,583	6,397	97,732

Arrivals and departures of steerage passengers for the year ending June 30, 1919.

Races.	Arrivals.						Departures.						Increase (+) or decrease (-).								
	Coast.			Orient.			Total.			Coast.						Orient.			Total.		
	Men.	Women.	Children.	Men.	Women.	Children.	Men.	Women.	Children.	Men.	Women.	Children.				Men.	Women.	Children.			
Chinese.....	10			221	33	24	36	2	1	405	21	30	441	23	31	210	10	7			
Japanese.....	34	12	4	1,613	1,909	380	174	30	12	2,122	1,244	1,617	2,296	1,274	1,629	-649	647	-1,245			
Filipinos.....				2,255	263	204	247	6	5	543	79	114	700	85	119	1,466	183	85			
Hindus.....																					
Koreans.....							10	2	2	12	1	3	23	6	5	-22	-1	-			
Porto Ricans.....							14	9	19		1		14	10	19	-14	-10	10			
Portuguese.....	17						65	42	119				65	42	119	-48	-43	19			
Russians.....							89	49	145				89	49	145	-89	-49	145			
Spanish.....				4			28	29	49	6	6	10	34	34	59	-30	-34	59			
All others.....	209	135	26	50	19	8	240	141	32	75	42	8	315	183	40	-56	-29	6			
Total.....	270	147	30	4,143	2,229	616	903	310	384	3,103	1,397	1,782	4,066	1,707	2,166	347	699	-1,820			

PUBLIC LANDS.

The following table shows the total area of Government lands and their estimated valuation.

Public lands of the Territory of Hawaii as of June 30, 1919.

Classification.	Area.	Total area.	Total valuation.
Agricultural lands.....		44,288.16	\$3,896,984.75
Cane lands.....	25,686.19		
Other agricultural lands.....	16,147.13		
Rice and taro lands.....	2,123.00		
Fish ponds, etc.....	358.84		
Net homestead area.....		35,802.78	1,228,864.75
Homesteads sold, amount unpaid.....	21,134.85		
Homesteads opened, untaken.....	12,178.75		
Homesteads surveyed, not opened.....	2,490.18		
Homesteads, exchanges and reserves.....		1,887.02	108,378.00
Pastoral lands (not cultivable).....		458,179.94	1,326,484.94
Total salable lands.....		540,158.50	6,560,712.44
Total forest lands.....		592,958.00	2,786,084.69
Forest lands.....	215,085.35		
Forest reserves.....	377,872.65		
Total area of lands of value.....		1,133,116.50	
Lands, no value.....		507,126.69	
Total public lands.....		1,640,243.19	9,346,797.13

HOMESTEADS.

There were taken up during the year 552 homestead lots covering an area of 8,877.364 acres, at valuations aggregating \$563,942.85, or \$63.53 per acre on the average. The homesteads taken averaged 16.082 acres each. They were taken by different nationalities as follows: Hawaiians, 165; Portuguese, 67; Americans, 47; others, 75. To enable homesteaders to obtain homesteads of suitable sizes for their needs they are given the option of taking one or two, or in some cases more lots. There were taken under special homestead agreements 473 lots, under certificates of occupation, 16; under right-of-purchase leases, 39; under cash freehold agreements, 2; homestead leases, 22; and special sales agreements, 37.

During the year 78 homesteads were surrendered or forfeited, covering an area of 1,766.823 acres, valued at \$25,825.21. During the same period 92 transfers of homestead lots were made, having an area of 1,892.69 acres.

A total of 206 planting agreements, representing 3,911.07 acres, were signed. During the year there were sold at auction for cash 28 lots, including residence, church, and business site lots, containing a total area of 69.364 acres, for \$10,691.75. A total of 70 general leases covering 88,319.498 acres were sold at an aggregate annual rental of \$22,992.82.

LEASES, LICENSES, TRANSFERS, EXCHANGES, AND PURCHASES FOR PUBLIC PURPOSES.

Land and water licenses, seven in number, were issued during the year, giving a total annual rental of \$2,492.90. Public lands in the Territory may be transferred from the Territory for the uses and purposes of the United States by order of the President.

The Territorial public lands are under the Territorial land department unless transferred by order of the governor for special purposes.

The following transfers were made during the year in the form of executive orders by the governor:

October 14, 1918: For the use of the board of agriculture and forestry for animal industry and forestry purposes, at Waiakea, South Hilo, Island of Hawaii, 6.15 acres.

October 14, 1918: For the use of the division of plant inspection of the bureau of agriculture and forestry, etc., Waiakea, South Hilo, Hawaii, 1,988 square feet.

December 18, 1918: For the use of the Hawaii Arsenal Reservation, subject to acceptance by the Secretary of War, 1.73 acres.

March 17, 1919: For the use of the county of Hawaii as a stable lot, 0.57 acre.

June 7, 1919: Teachers' cottage lot and agricultural garden, Hanapepe, Waimea, Kauai, 2.70 acres.

June 27, 1919: For a public park to be known as the "Lehia Park," Waiakea, South Hilo, Hawaii, 54.68 acres.

June 27, 1919: For a public park to be known as the "Pa Pelekane Park," at Lahaina, Maui, 14,020 square feet.

June 27, 1919: For a public park to be known as the "Wailuku River Park," at Piipihonua, South Hilo, Hawaii, 245 acres.

June 27, 1919: For the use of the Pearl Harbor Naval Station for wireless purposes, subject to acceptance by the Secretary of the Navy, Wailupe, Honolulu, Oahu, 36,076 square feet.

PATENTS AND COMMUTATIONS.

There were issued during the year 229 patents, covering an area of 2,946.76 acres, for considerations aggregating \$106,161.87 or at the rate of \$36.02 per acre. Of these 35 were right-of-purchase leases, 10 land exchange, 35 time payments, 7 cash freehold agreements, 47 cash purchases, 44 preference rights, 1 compromise with abutting owner. There were also issued 3 patents based on land-commission awards upon payment of commutation, the area being 3.328 acres and the commutation \$34.

REVENUES AND DISBURSEMENTS.

The total receipts of the land department were \$545,751.13, as compared with \$575,015.21 for the preceding year. Expenditures were \$33,905.74.

Receipts of public lands department for the year ending June 30, 1919.

Rents:		
General leases.....	\$310, 436. 39	
Tenants at will.....	15, 415. 20	
		<hr/> \$325, 851. 59
Interest and fees:		
Right to purchase lease.....	7, 635. 80	
Cash freehold agreements.....	101. 23	
Homestead agreements.....	104. 79	
Special homestead agreements.....	12, 253. 40	
Special agreements.....	2, 268. 69	
Special sales agreements.....	1, 259. 00	
Interest on commutation.....	27. 43	
Office fees.....	757. 50	
		<hr/> 24, 407. 84
Government realization.....		2, 822. 29
Land sales:		
Right to purchase lease.....	11, 468. 59	
Cash freehold agreements.....	986. 85	
Special homestead agreements.....	78, 868. 58	
Special agreements.....	17, 508. 19	
Special sales agreements.....	11, 692. 17	
Government commutation.....	97. 40	
		<hr/> 120, 621. 78
Cash sales.....		41, 455. 35
Preference rights.....		26, 342. 03
Improvements on lands.....		265. 25
Board of education.....		3, 985. 00
		<hr/> 545, 751. 13

NATIONAL PARKS.

There is now pending in Congress a bill to authorize the governor, with the approval of the Secretary of the Interior, to acquire by exchange or otherwise, privately owned lands and rights of way within the boundaries of the Hawaii National Park, such boundaries having been defined by "An act to establish a national park in the Territory of Hawaii," approved August 1, 1916, and all necessary perpetual easements and rights of way, or roadways, in fee simple, over or to said land or any part thereof.

The Hawaii National Park, as defined by congressional act, comprises three separate areas. These are the active volcano of Kilauea at an elevation of approximately 4,000 feet on the side of Mauna Loa Mountain, Island of Hawaii; the active crater of Mokuaweoweo on the summit of Mauna Loa at an elevation of 13,675 feet, and the large extinct crater of Haleakala, on the island of Maui.

A good trail from Kilauea to the summit of Mauna Loa has been constructed by the Volcano Research Association and there will probably be no difficulty in acquiring it if desired by the Government. All of the private lands in the Mauna Loa Park area have been acquired and tentative agreements secured for acquiring the lands, easements and rights of way, desired in the Kilauea area and in the Haleakala Park, as soon as authority is given by Congress.

Hon. Stephen T. Mather, Director of the National Park Service, and Charles Punchard, landscape engineer, visited Hawaii in April for the purpose of studying conditions and expressed themselves as very favorably impressed with the prospects offered by the three separate park areas.

SURVEY DEPARTMENT.

FIELD WORK.

ISLAND OF HAWAII.

Waiakea homesteads.—Nearly all of the arable portion of the large land of Waiakea, near Hilo, was subdivided into homestead lots and house lots. Most of this was cane land that had been under a long term lease to the Waiakea Mill Co. The original request was for a subdivision of 2,000 acres, but public demands on the land office necessitated an extension of the division to include some 6,000 acres, which provided 239 one-acre house lots and 194 lots ranging from 10 to 50 acres, with the greater number between 20 and 40 acres each. Twenty-nine miles of new roads were marked out and 20 miles of existing railways located. Detail surveys were made, such as flume lines, camp sites, school lots, parks, cemeteries, etc., over an area of 270 acres.

Ahualoa homesteads, Kaimu homesteads, etc.—Four lots in Ahualoa homestead tract, second series, Hamakua district, were re-marked. Four lots of the Kaimu tract, Puna district, were subdivided into eight beach lots of about $2\frac{1}{2}$ acres each. Waiakea warehouse lots, Hilo, were marked with permanent monuments. A boundary check survey was made of the private property, Ili of Honohononui, which lies within the public land of Waiakea. A portion of the line of the Olaa Forest Reserve, in Puna district, was established and marked on the ground.

Miscellaneous surveys.—These included additions to Honomu and Halawa school lots; lots affecting improvements to the Volcano Road, Puna, and several other surveys.

ISLAND OF MAUI.

Haleakala homesteads, Makawao.—Several lots were resurveyed and other lines established to adjust pending transactions.

Alae 3 and 4, homesteads, Kula: Resurvey made of a large portion to adjust lot lines and roadways.

ISLAND OF OAHU.

Miscellaneous surveys.—New road through portion of Aiea homestead tract; new ditch line through Palolo homesteads; Wailupe school lot subdivided into four shore lots; Kuliouou, Kuaokala, and Pupukea-Paumalu forest and water reserves; additions to Kamoiliili, Kauluwela, and Waipahu school lots; two lots in Palolo Valley for road strip exchanged; four parcels on Alewa Heights for same purpose; lots on Miller and Hotel Streets, and Miller and Beretania, for public purposes; Government lot in Pauoa Valley for exchange; Government lots on King Street and Asylum Road, for sale; Washington Place, governor's residence; Waikiki Beach lots wanted for addition to Kapiolani Park; grades for Kalihi Quarantine Station improvements; location and areas filled portion of Kaakaukukui tide lands, Honolulu Harbor section; home for blind and defective children, Kapiolani Park; 13 lots on Alewa Heights staked; 4 Waiaka house lots re-marked.

ISLAND OF KAUAI.

Hanapepe Valley.—Classification and title survey was made of the valley section, including some 89 land-commission awards, portions of the two privately owned ilis, Kuiloa and Eleele, and about 393 acres of Government land.

Kokee reservoir sites.—A contour survey was made of the proposed sites of three reservoirs.

Miscellaneous surveys.—Located roadway and boundary lines between lots 238 and 239, Kapaa homesteads, fourth series, and land leased to Hawaiian Canneries Co.; marked bounds of land commission award within lot 234, same tract; lots 203, 204, and 229, Kapaa homesteads, fourth series, comprising 53.64 acres, divided into 41 house lots; blocks Q, R, S, T, of Kapaa town lots, subdivided into 20 lots; 7 Waimea village lots restaked; Catholic Church lot, Kapaa; section of Lihue-Koloa Forest Reserve boundary fence; two parcels of land in Waimea for road purposes; established lines for widening section of Government main road, Hanapepe; Japanese Church lot, Hanapepe, garden lot and playground lot for Government school, Hanapepe.

LAND COURT PETITIONS AND FILES.

The department examined and reported on 36 surveys and maps submitted by the land court, and two plans for filing in the office of the registrar of public conveyances.

OFFICE WORK.

A group map of the Hawaiian Islands, drawn to a scale of 1 inch to 40,000 feet, was completed and will soon be published. The first edition will be in two sizes—1 inch to 40,000 feet and 1 inch to 60,000 feet. The larger map is intended to serve as a school or wall map, and the smaller should be of value for commercial and other purposes. As inserts, were added the "Crossroads of the Pacific" map, a small-scale map of the Hawaiian Archipelago, and special plans of the three craters included in the Hawaii National Park.

Special maps of the island of Oahu, showing fishery rights, both Government and private, were compiled. In addition, much other work of checking, examining, and reporting on surveys was done.

BUREAU OF AGRICULTURE AND FORESTRY.

By the separation of the marketing division which the legislature, in special session, made effective on July 1, 1918, this board operated for the benefit of the Territory during the past fiscal year on four lines—forestry, entomology, plant inspection, and animal industry.

FORESTRY.

In the work of forest protection, one of the two main activities of this division, a turning point was passed by the completion of the work in setting apart the main forest reserve system in the Territory. During the year, five new reserves were proclaimed by the governor, an addition was made to one, and an elimination from another. The new reserves consist of the Nonou of 818 acres and the Puu Ka Pele of 4,900 acres, on Kauai, the Mokuieia of 6,290 acres, and the Hauula of 9,193 acres on Oahu, and the Olaa of 20,030 acres on Hawaii. An area of 104 acres was added to the Makua-Keaau Reserve on Oahu and from the Puu Ka Pele Reserve on Kauai 415 acres were withdrawn to be turned over to the county for public park purposes. These new reserves include the larger part of forested land which remained to be officially set aside and managed under forestry principles mainly for the conservation of water and the beneficial influence which they may have on the surrounding land.

During April, 1919, a detailed check and tabulation was made of the areas of all lands in forest reserves at the request of the legislature. This revision shows that there are now 47 forest reserves in the Territory, having a total area of 818,739 acres, of which 558,655 acres, or 68 per cent, is Government land.

The work of actual forest protection has progressed at the same time with the completion of this work of forest demarcation. The main efforts have been directed toward ridding the susceptible native forests in the reserves of injurious stock. This has been accomplished in two ways—by the issuing of permits to responsible hunters and ranchmen, and by the construction of new fences and the repairing of old fences to prevent the access of stock. By the first method, over 780 head of wild cattle, pigs, and goats were eliminated from the reserves during the past year. This work will no doubt be greatly facilitated by a new law which authorizes the killing of branded wild cattle in fenced reserves without compensation to the

owner, after giving due published notice. Under the second method, a total distance of 14.87 miles of forest-reserve boundaries was made stock proof during the fiscal year by fencing operations.

The force of eight forest rangers on the four main islands have continued to render efficient service in preventing trespass, performing forest work, such as fencing and tree planting, and in the general administration of the forest reserves.

In spite of an unusually dry winter, only four fires have occurred during the year, but these were extinguished at once with small damage to the forest.

The encouragement of tree planting throughout the Territory was continued by the raising and distribution from the three government nurseries of 297,902 seedling trees during the last calendar year. In the interest of protection against the dissemination of injurious insects in soil around the roots of trees, the division on June 1, discontinued the practice of shipping trees in soil from Oahu to the other islands and to meet the demand for trees on the other islands it has enlarged the Hilo nursery and is now establishing new nurseries on Maui and Kauai.

Tree planting operations have been conducted in four different localities on forest reserves, the greatest attention being paid to reforestation on watersheds adjacent to settlements in order to conserve the water supply. A total of 20,000 trees of various species were thus planted out and cared for during the calendar year 1918 and one-half of these consisted of the native Koa. A new mountain nursery was started in the Waianae Mountains on Oahu, with others to follow.

A section of high mountain country at Kokee on the island of Kauai was opened up to summer campers under a permit system. A total of 48 camp sites were surveyed out on meadow land along mountain streams and half of these have already been taken up under 10-year permits.

ENTOMOLOGY.

The work of the entomological division, performed by a graduate entomologist and two laboratory assistants, has consisted of introducing, propagating and distributing beneficial insects, advising in regard to agricultural and stock pests, and investigating various projects for improving the control of insects detrimental to agriculture and stock raising.

The beneficial insects propagated and distributed have been the Mediterranean fruit-fly parasites, the melon-fly parasite, the corn leaf-hopper egg parasite, mealy-bug parasites, etc. A great improvement has been noticed in the fruits attacked by the fruit-fly and the melon-fly, and the corn leaf-hopper egg parasite has been used as a means of checking incipient leaf-hopper attacks. New field work has not been undertaken on account of unsettled conditions abroad and poor transportation facilities, but in the latter part of the year the cooperation of the California State Commission of Horticulture was secured, and through the assistance of their entomologist, a hymenopterous parasite of the pupa or chrysalid of the cabbage butterfly, the worm of which is very destructive to cabbage plants, has been introduced and its naturalization attempted. Both the parasite and its host were originally European insects. An ex-

hibit of economic entomology and demonstration of natural control of insect pests was made at the Territorial fair in June, which attracted considerable attention and proved of great educational value.

The investigational work of the entomologists has consisted of a study of the termites or white ants, the natural control of scale insects with a view to its improvement, the control of the biting flies which attack live stock, etc. Some time has also been given to the study of several groups of endemic insects as a contribution to scientific entomological knowledge.

PLANT INSPECTION.

The work performed by the chief plant inspector and his assistants during the fiscal year consisted of the following:

1. The inspection of all fruit, plants, and vegetables coming into the Territory by mail, freight or baggage from foreign countries and the mainland of the United States, to prevent the introduction of pests and plant disease liable to become injurious to the various agricultural industries of these islands.

2. The inspection of all fruit, plants and vegetables shipped from Honolulu to all ports of the other islands for the purpose of preventing the spread of any pest existing on Oahu to the adjacent islands. Honolulu being the only port of entry for foreign plants and plant products, it follows that injurious insects and diseases will first become established on Oahu.

During the past fiscal year there arrived at Honolulu, Hilo and Kahului, the only ports in the Territory where fruit or vegetables enter directly and at which places local inspectors are stationed, 834 vessels. Of these, 292 carried vegetable matter consisting of 240,330 packages of fruit and vegetables and 9,551 packages of plants and seeds. Of this amount, 7,212 packages were fumigated on account of infestation of various kinds; 466 packages were destroyed by burning on account of infestation or being contraband, and 896 packages were returned to the original shipper as contraband and unmailable.

In addition to the regular steamers, all tramp steamers touching at Honolulu for fuel and supplies are boarded and inspected for vegetable matter. Particular attention is given to those coming via the Panama Canal and other tropical countries in order to prevent the escape of possible pests carried on plants or vegetable supplies in transit. Notices and copies of Federal and Territorial quarantine laws are furnished to the proper officers of these ships in order that they may be able to take the proper precautions against bringing undesirable insects and plant diseases into the Territory.

The shortage of shipping has materially decreased the importations of fruit and vegetables. Following are some of the larger staples imported:

Oranges.....	boxes..	25, 393	Lemons.....	boxes..	5, 394
Cabbage.....	crates..	217	Celery.....	crates..	630
Onions.....	bags..	29, 343	Potatoes.....	bags..	93, 877

Wartime conditions have stimulated local efforts at producing these products with such marked success that it is quite possible that home-grown fruit and vegetables will continue on the market after shipping conditions are normal again.

During the fiscal year 696 steamers were attended to in the inter-island inspection and 11,935 packages of plants, fruit and vegetables were inspected. Of this number 129 packages were seized and refused shipment on account of infestation or having undesirable soil attached to the roots.

ANIMAL INDUSTRY.

This division which is mainly engaged in the control and eradication of infectious and contagious diseases of live stock has during the past year continued its efforts at suppressing bovine tuberculosis while the restrictive measures against anthrax have been successfully enforced. The latter disease, which appeared on three of the principal islands, almost simultaneously, during 1917, may now be said to be under complete control. Only two cases, both on the island of Kauai, occurred during the past year. In combating this disease the Territory has expended nearly \$50,000, while the loss of live stock has amounted to nearly the same sum. With the continued vaccination of all cattle in the infected districts there is no longer any cause for apprehension as to its permanent establishment here.

The eradication of bovine tuberculosis has progressed favorably since the territorial legislature provided ample funds for the indemnification of the owners of infected cattle. The 1917 as well as the 1919 legislature appropriated \$20,000 for this purpose, and it is expected that the end of the present fiscal year will see the amount of infection reduced to less than 1 per cent.

No case of glanders or epizootic lymphangitis has come to notice during the past year, and only one outbreak of swine plague and necrotic enteritis has been recorded. Hog cholera has not occurred in the Territory for several years.

Live stock importations have increased to a certain extent since the ending of the war. A considerable number of good dairy cows have been imported, while the beef-cattle breeders have brought in some of the best blood, especially Herefords, obtainable in the States. Hog raising continues on the increase and only smoked meats of this class are now imported.

Owing to the continued high cost of feed and transportation, the dairy industry remains confined to the production of the requisite amount of milk, which retails at 15 cents per quart, while practically all butter and cheese is imported. The same applies to poultry and eggs. The disease known as chicken pox or sore head is quite prevalent, and even though vaccination is practiced to a considerable extent it is difficult to raise chickens which are hatched later than the end of May.

DIVISION OF HYDROGRAPHY.

SURFACE-WATER SUPPLY.

This last year has been one of general deficiency of water. While there has been at no time a record-breaking drought, the streams have been at a low stage for most of the year and run-off for the winter months was the lowest for a number of years.

On June 30 the division was operating 81 stream and ditch gaging stations. Sixteen stream and ditch gaging stations were established during the year and 8 stations were discontinued. During the year 430 stream and ditch discharge measurements were made.

To avoid duplication of work the rainfall stations which this division operated were turned over to the United States Weather Bureau in April.

UNDERGROUND WATERS.

Investigation of the artesian wells in and around Honolulu has been continued. This investigation shows that the artesian head is gradually falling due to the overdraft on the artesian basins. The investigation also shows that probably two-thirds as much water as the city of Honolulu uses is being wasted underground due to defective well casings. A report on the wells operating contrary to law has been submitted to the attorney general.

SPECIAL INVESTIGATIONS.

In the Upper Waimea drainage, island of Kauai, progress has been made on a special report requested by the governor. This report will deal with the question of available water, also method of storing and conducting it to the Government lands at Kekaha. The normal flow of these streams has already been appropriated and only the flood flow is available for use. The three reservoirs have a combined capacity of 2,000 million gallons daily.

In compliance with house resolution No. 124, session of 1917, data was obtained and a favorable report made on the question of a water supply for Halawa Valley, island of Molekai.

In compliance with house resolution No. 145, session of 1917, data was obtained and a report made on the question of a water supply for Waianae and Hauula districts, island of Oahu.

AGRICULTURAL EXPERIMENT STATION.

During the last year the energies of the Federal experiment station have been directed largely to the most pressing problems of production of food for human beings and feeds for animals. This work has been prosecuted in part by the distribution of seeds, cuttings, and plants to private parties and public institutions. Improved varieties have been given wide distribution and up-to-date cultural methods, spraying for insects and fungus enemies, and other means of increasing the crop yields have been received and adopted by the producers to a gratifying degree.

The station has continued to emphasize the desirability of diversified crops. It is felt that too much emphasis can not be laid on the desirability of having other crops produced in such quantities that the agricultural practices necessary to the production of these crops would be a matter of common knowledge on the part of plantation laborers and others, thus enabling large scale production to be readily arranged for in case any calamity should arise in connection with the sugar, pineapple, or banana industries.

As a step in this direction the production of various root and tuber crops for starch production, together with the drying and preserving of vegetable and fruit products, has been given attention on the part of various station workers. With this end in view, Mr. F. G. Krauss, superintendent of the extension division, in company with a representative of one of the local agricultural companies, made a trip of

inspection and investigation to the mainland to determine market possibilities, methods of manufacture, etc., covering the starch production industry.

The preliminary investigations made with cassava and edible canna indicate that at present prices a profitable industry could be developed. Yields of cassava as high as 16 tons per acre, and of edible canna at the rate of 40 tons per acre, under ideal conditions as to soil fertility and moisture, indicate the possibilities along this line when it is realized that about 10 per cent of the edible canna and 25 per cent of cassava is commercially extractable starch. The cassava starch is useful in sizing cotton goods as well as in the preparation of certain forms of adhesives, and is also the source of the tapioca of commerce. The edible canna, with its extraordinary large starch grains, forms a product said to be superior to arrowroot starch for weak stomachs, and it is thought that such a product will always command a price sufficient to make its continued production profitable.

Horticultural investigations.—An important feature of the horticultural division work has been to extend the growing of macadamia nuts. About 1,000 seedlings have been planted at various elevations.

Work with the avocado has been continued and material progress made toward its improvement. Several small cooperative commercial orchards have been started to demonstrate the possibilities of the commercial production of this fruit, which contains a high percentage of fat. Sixteen new varieties of the Guatemalan type of avocado have been received from the Department of Agriculture at Washington and planted for observation.

The mango work has demonstrated the best varieties for island conditions and propaganda has been started to further the development of the superior strains. As a result of this, numerous seedling trees throughout the islands have been top-worked into improved strains.

Investigations have been continued concerning the propagation of the litchi tree, as this delicately flavored fruit has great possibilities in the islands.

The station has given some attention to the development of methods of manufacture of the various fruit and vegetable products, such as dried bananas and other fruits, pickled fruits and vegetables, avocados for preserving in various ways, guava jelly, vinegar from pineapple waste, and candies made up on a foundation of macadamia nuts. While it is possible that no one of these individual projects taken alone would be profitable on account of the overhead expense, it is felt that there is a good opening for an enterprise which would group these various activities under one management and stimulate production on one hand and distribution on the other.

Second annual Territorial fair.—The first annual Territorial fair, June, 1918, was stimulated to a remarkable degree by the enthusiasm developed by the war. Although the second annual fair in June, 1919, did not have this stimulus, very effective work by the county agents and other committeemen overcame this seeming handicap, and the result is generally conceded to have surpassed that of even the previous year. The purposes of the second annual Territorial fair were so fully in line with the underlying purposes of the experiment station in emphasizing the desirability and possibilities of diversified crop production, that all the available resources of the station were

temporarily devoted to bringing to a successful conclusion the particular activities for which the station or its staff members were made responsible by the fair commission.

The exhibit by the sugar plantations of other industries that are receiving their attention was very commendable. The making of cement from nonimported materials and the practicability of obtaining fuel from waste cane molasses were demonstrated.

One plantation made an extended exhibit of its work developing home-grown feeds for live stock.

Chemical investigations.—The drying and preservation of Hawaiian fruits and vegetables has been followed as one of the leading projects of the division of chemistry throughout the year. A working model of a food dryer was constructed on the station grounds and tests made with island food products.

Agronomic investigations.—During the year agronomic activities of the station were concerned primarily with the most practical means of rapidly increasing the production of food and forage crops. This was effected first by extensive distributions of seeds, cuttings, and tubers to all who had proper facilities for growing them.

Agricultural extension work.—The object of the extension division is to bring to each farmer the most practical solution of his agricultural problems. The Haiku Demonstration and Experiment Farm has served as a basis of operations for the extension divisions. Experiments and demonstrations under way during the year have been in connection with improved varieties of corn, potatoes, alfalfa, starch crop, cassava and edible canna, sweet potatoes, Irish potatoes, and pigeon peas, and with fertilizer tests with the above crops as well as with pineapples. A variety of corn had been developed which has yielded as high as 100 bushels to the acre.

Plant-disease investigations.—Most of the pathologist's time has been taken up with the investigation of the taro rot and the banana freckle disease. The latter is a serious malady which first came under observation in 1917, and which now threatens the entire industry. Cooperative experiments with one of the leading banana growers have resulted in the systematic spraying of a 75-acre field, with very promising results.

PUBLIC WORKS.

OAHU.

General.—The maintenance of the several Territorial buildings has been along the usual lines, such as repairing woodwork, plumbing, and repainting.

During most of the year the chamber of the house of representatives in the capitol was occupied by Red Cross workers, and the senate chamber as selective draft headquarters. When the legislature convened in February, these moved to other places to operate until their main activities should be canceled. The local and district exemption boards had their rooms in the National Guard Armory.

The historical old bungalow in the capitol grounds has been torn down, as it had become unsafe. The old band stand, built originally for the coronation of King Kalakaua, has been repaired recently by special appropriation of the legislature. The stand was virtually eaten up by large ants and borers, and had become too dangerous for public use. A base and pillars of concrete have been built for it.

A two-story concrete and frame building for the normal training school was completed during the year, at a cost of \$30,835.38. The preliminary work was done by prison labor.

The Territorial powder magazines started during the previous period have been completed, together with a small railroad 1,250 feet long from the buildings to the boat landing, and an 11-foot high barbed-wire fence around the group. During a disastrous oil fire on Sand Island in March, 365 feet of the track was destroyed. This was rebuilt at the expense of the oil company under direction of the department. Some 50,000 cases of kerosene and gasoline were destroyed in this fire.

A large number of gasoline and crude oil tanks have been installed on the various islands, under the inspection of the department. In all large storage installations where the tanks are above the ground and where it is considered necessary in order to protect the harbor and water front and surrounding property, concrete retaining walls will hereafter be required providing a space equal in volume to the contents of the inclosed tanks. Amendments were made by the recent legislature to increase the safety of storage of these combustibles.

Work was done by the department at the Boys' Industrial School, the Girls' Industrial School, the insane asylum, and the armory. Surveys for a sewer and irrigation system at the Territorial penitentiary were made.

Kanoa estate fill.—Work has just begun in the filling in of insanitary lands owned by the Kanoa estate in Kewalo district, Honolulu. In December, this land was condemned by the board of health. It is about 79,715 square feet in area and some three-fourths of it is a stagnant film covered pond from 6 inches to 4 feet deep. So close are the surrounding residences that an epidemic of some sort was feared. About 16,350 cubic yards of fill will be placed.

Improvement of judiciary grounds.—The 1917 legislature appropriated \$2,500 which was increased to \$5,000 by the special session in 1918, for the improvement of the Judiciary grounds. These were in a wretched and neglected condition, with dirt paths and roads full of chuck holes and ruts, and with no drainage. A number of old, useless trees have been cut down, the old curbing torn up and reset and regraded. Cement sidewalks have been placed in front of the yard and general repairs made. An asphalt macadam road was constructed around the entire judiciary grounds.

Waikiki reclamation.—The drainage and reclaiming of the Waikiki swamp lands is one of the most important pieces of work ever undertaken by the department.

Act 231 of the 1917 legislature provided for the appointment by the governor of a commission of five members to be composed of the superintendent of public works, the city and county engineer, Honolulu, the commissioner of public lands, a representative of the owners of the shore and beach lots which may be affected by the project, and a representative of the owners of lands situated within the area covered by the project. The sum of \$20,000 was appropriated in 1917 to defray the expenses of this commission, and in addition Act 102 of the same session provided \$5,000 for making surveys and maps of the district.

Act 14, special session of 1918, provided for the acquisition of the right of way for the main drainage canal, and that the location, width, and depth of the main drainage canal should be determined by a second commission, consisting of the superintendent of public works, the city and county engineer of Honolulu, and the ranking officer of the quartermaster or engineer corps, Hawaiian Department, and subject to the approval of the governor. This latter commission was organized in July, 1918, and held its first meeting with the governor, who went over and explained the act and discussed the project in a general way. Immediately after this meeting the commission of three went over all available plans and data and decided it would be necessary to acquire more data and continue the surveying and other field work until all properties were located and a plan made of same through which the proposed canal would pass.

This survey work was far enough advanced early in September so that the commission could study the project. The canal was finally located, having a width of 150 feet with a 75-foot boulevard on each side, making a total right-of-way to be acquired of 300 feet. The depth was to be variable, extending deep where soft material was encountered and passing over any extremely hard and difficult dredging, cutting off only enough to allow for the passage of a dredge and allowing for the free flow of water.

It was decided that the canal should pass through the property of as few private owners as possible, and through as much government land as possible. With this end in view it was located with 80 per cent of the right-of-way passing through the property of but six owners, including the Government.

By continuing the Mauka boulevard at the Ewa end of the canal to the intersection of South and King Streets, and the Waikiki end to Fort Ruger, a magnificent drive will be secured, opening up land now almost inaccessible and converting low valued and unimproved property into valuable real estate for both residential and business purposes. A direct route connecting the various military posts with the city and with each other will also be obtained.

After the commission of three had reported, the work was taken up again by the first commission under the superintendent of public works as chairman. Field work is being continued. The canal has been staked out with permanent concrete markers, and borings have been taken for the full length to ascertain the character of material to be dredged.

Due to the large number of small holdings and their irregular shape in and adjacent to the main canal from McCully tract to Kipahulu Road, it has been considered advisable to acquire all the land between the right-of-way and a line drawn parallel to and 500 feet mauka of same, in order to make equitable exchanges. Owners in the district have been requested to place a value on their lands, but in most cases they have been slow to cooperate with the Government in this respect. To save further delay condemnation proceedings will be instituted at once.

A vast amount of detail work has been necessary in this preliminary activity of the commission, as shown by the fact that 340 separate pieces of property in the area affected by the project, except properties already improved, have been located and plotted, showing a total of approximately 1,214 acres, requiring a fill of 3,580,000 cubic yards.

The present assessed values run as low as \$83 per acre, and as high, in a few cases, as \$16,000 per acre, but the majority are between \$84 and \$400 per acre.

The system of drainage forms no serious obstacle, but the greatest physical problem is to obtain the immense amount of material for the fill, at a cost not prohibitive.

HAWAII.

Ponahawai sanitation project.—Although surveys were begun on this important project in August, 1917, various unavoidable happenings have held it up. New tenders have recently been called for, but the date of opening postponed indefinitely on account of the possibility of an injunction suit being filed by property owners along the beach in case a proposed fill was made by pumping sand from the beach. As soon as a place for the necessary fill can be obtained without danger of litigation, tenders will be called for again and a contract let. This particular land is unsightly, insanitary, and a menace to the health of the city of Hilo. Its reclamation will add considerable valuable land to the business and manufacturing portion of the city.

Hilo tax office.—This building, as first planned, was completed at the end of August, 1918, but the 1919 legislature provided \$15,000 for the construction of a second story.

MOLOKAI

Hydroelectric and water-supply investigation.—Act 87 of the 1919 legislature provided for an investigation and report as to the cost of installing a hydroelectric plant and increasing the water supply of Kalaupapa, and an appropriation of \$2,500 was made to cover the cost of such investigation. An engineering party has already made the necessary surveys and a gaging station has been established in Waikolu Canyon, by the bureau of hydrography. This station will be maintained and complete records of flows kept over a period of two years. The installation of such a plant and the development of a water supply would be of inestimable value to the leper settlement, as it would eliminate the use of kerosene lamps and thus decrease the danger from fire. By irrigation the settlement could raise all its own taro and could grow feed for almost enough cattle to supply its own beef, the cost of which at present runs into a very large sum each year.

BOARD OF HARBOR COMMISSIONERS.

ISLAND OF OAHU.

Pier No. 2, Honolulu.—The construction of a reinforced concrete bulkhead wharf on the site of the old Pier No. 2 (channel wharf), which was authorized by the 1917 legislature under the loan fund act, is to proceed at once under an act of the 1919 legislature making \$270,000 immediately available from the general fund for this purpose, same to be reimbursed from loan funds when the bonds are sold. It is proposed eventually to construct cargo sheds with passenger facilities at this pier and provisions have been made for all requisite superstructure foundations, and for fuel oil, water, drainage, and sanitary sewer lines.

The portion of the project to be taken up during the 1919-1921 period provides for construction to the top of the deck only. Present conditions in regard to the lumber commerce of the port make it essential that provisions be made for taking care of this business at an early date. This pier will provide a berthing space of 1,189 linear feet and a total deck area of 207,124 square feet and is to be of the most modern type of permanent cement masonry construction. It will adequately and satisfactorily accommodate the lumber commerce of the port until such time as a permanent location can be decided on and developed.

Superstructure, Piers Nos. 8, 9, and 10.—These piers with their combined berthing space of 1,760 linear feet and an available area of 256,800 square feet have been utilized for several months past in handling the very considerable lumber traffic of the port and in fact are at present the only piers owned by the Territory available for that purpose. In addition to the large amount of lumber handled over these piers, there has been considerable commercial freight and passenger traffic handled, and also most of the coal used by the United States Army Transport Service.

Plans and specifications are now virtually completed for the construction of modern, fireproof, combined freight and passenger sheds for this project.

Reconstruction of Pier 16.—Reconstruction of Pier 16, which was started during the period 1916-17, was completed. In the reconstruction of this pier the board has replaced 213 wooden piles with concrete, a total of 5,656 linear feet of concrete piles, has rebuilt 47,689 square feet of timber deck and deck framing, using new materials, and has constructed 1,825 linear feet of timber fender at a total cost for the entire project of \$76,578.16.

Kewalo Basin.—The board of harbor commissioners has drawn up plans for the development of Kewalo Basin, Honolulu, into a harbor for handling the sampans which now use the slip between Piers Nos. 15 and 16, and also to handle the lumber trade of the port. With the development proposed the sampans will have their own concrete wharf, with approximately 900 feet of docking space and fuel tanks and clean water to wash their nets and other fishing tackle, and a lumber wharf 900 feet long will be provided on the opposite side of the basin. These improvements, together with the necessary dredging within the basin and an entrance channel approximately 200 feet wide, 27 feet deep, and 1,300 feet long, will cost approximately \$568,000.

The estimate made up for the 1919 session of the legislature provided for \$132,000 for the first unit of this project, but after a careful study of the situation it was considered advisable first to acquire the Bishop estate fill just adjacent. Consequently, the legislature appropriated \$125,000 for the purpose of acquiring this fill, and negotiations are now under way with the Bishop estate trustees.

Acquisition of waterfront property.—The board of harbor commissioners requested the governor to appoint a board of appraisers with the authority to appraise and negotiate with the owners for the lot at the end of the slip between Piers Nos. 15 and 16, owned by the Oahu Railway & Land Co., the Allen and Robinson property on Queen Street, extending back as far as Pier 10, the old marine railway site, owned by the Bishop estate, and the Inter-Island Steam Navi-

gation Co. property, both situated on Ala Moana Road. The board was appointed, and on completion of its work reported to the governor, who in turn made the necessary recommendations to the legislature. The legislature appropriated the sum of \$601,778 to acquire by purchase or condemnation proceedings the Allen and Robinson properties, and \$25,000 for the property owned by the Oahu Railway & Land Co. Nothing was done toward acquiring either the Inter-Island Steam Navigation Co. property or the Marine Railway site.

Waterfront guards.—In accordance with Federal war regulations, guards were placed both night and day at the entrance to all Territorial wharves, and only authorized persons having in their possession a pass issued by the United States Department of Justice were admitted to these wharves, all unauthorized persons being rigidly excluded. To maintain this guard cost the Territory approximately \$3,000 per month. A guard was also maintained at Hilo.

ISLAND OF HAWAII.

Kuhio wharf.—Kuhio wharf has been available for the use of deep-sea vessels and general interisland traffic through the period, but as in the past has not been utilized to its full capacity. The extension of the Hilo Breakwater has furnished increased protection to this wharf and has greatly decreased the force of the currents which, under certain weather conditions, has made the mooring of large vessels at the wharf dangerous and difficult.

Conveyors.—The mechanical sugar conveyors have been operated continually during the shipping season and during the past year have handled a total of 38,316 tons of sugar, an increase of 5,678 tons over the previous year. These are the property of the Territory, but are maintained and operated by the Hawaii Consolidated Railway Co.

New wharf.—The 1919 session of the legislature increased the 1917 appropriation of \$250,000 to \$500,000 for a new wharf at Hilo, thus insuring sufficient funds to complete the entire project at one time. The work is being held up temporarily until the matter of the exact site can be determined.

ISLAND OF MAUI.

Hana.—The reinforced concrete pile wharf at Hana, Maui, for which a loan fund appropriation of \$75,000 was made by the 1917 legislature and which the 1919 legislature increased to \$95,000, is now in process of construction. This wharf is of reinforced concrete throughout, and is supported by precast driven piles. It is T-shaped in plan, 250 feet in length, 45 feet in width, with an approach connecting with the main deck on the inland side at about the center of its length. This approach is of the same class of construction as the main wharf. It is 25 feet in width and approximately 135 feet in length. The approach continues inland from the end of the concrete structure, with a riprap earth fill, having a macadamized surface 25 feet in width to an intersection with the county road near the old wharf site, a distance of approximately 1,350 feet. The wharf is to be equipped with ship fenders and corner fenders, boat stage, and mooring bitts of the usual type. Water service and electric lighting is provided for. Wharf sheds, derrick and hoist, and a double-

track railway extending the entire length of the main wharf and connecting with the local plantation railway system have been provided for in the design, and will be installed upon the completion of the present contract.

Dredging Lahaina Channel.—The 1918 special session of the legislature appropriated \$5,000 for the purpose of blasting away the reef or by using other methods for improving the condition of the channel at Lahaina, and if possible to make this landing comparatively safe. A drag-line bucket was set up and a channel blasted and dredged through the reef, approximately 60 feet wide on the inland end and about 30 feet wide at the outer end, and to a minimum depth of 15 feet. The material was dragged ashore and hauled away by trucks and wagons for filling and road purposes. In addition to the dredging a very considerable amount of mushroom coral on the Olowalu side of the channel was blasted out. As the methods of doing this work and the results were proving satisfactory, when the \$5,000 appropriated was exhausted, the county of Maui appropriated an additional \$5,000 to continue the work, with the proviso that the board of harbor commissioners recommend to the legislature that the county of Maui be reimbursed for this amount. This was done and the money refunded. The work was discontinued when the second \$5,000 was expended. Suitable markers have been placed at the outer end of the dredged channel. The work has materially helped the situation, but should be further continued to make the landing safe, although now during any but the most severe weather conditions boats should make this landing with ease and safety.

ISLAND OF KAUAI.

Repairs.—Considerable maintenance repair work and some new work has been performed on the Territorial wharves at Nawiliwili, Hanalei, and Waimea during this period.

Investigations for wharf sites.—Investigations were made which included the taking of numerous borings and soundings at Ahukini, Kapaa, and Anahola, and after careful study it was recommended that Kapaa should be developed. The project as outlined includes straightening the present channel and dredging out a basin, 650 feet wide and 850 feet long, and constructing a concrete wharf connecting to the shore with a 700-foot approach and also to construct a breakwater approximately 900 feet long on the east side of the harbor. The legislature appropriated \$182,000 for this work.

Survey for right of way.—For the purpose of acquiring the right of way to the proposed wharf and breakwater sites in connection with the proposed development of Nawiliwili Harbor jointly by the Federal and Territorial Governments, a survey of the shore lands was made of the proposed right of way, starting from the old landing and extending around to Carters Point, consisting of approximately 43.4 acres. Two of the property owners along this survey have agreed to deed the right of way free to the Territory, and against the rest of the land condemnation suits have been instituted.

PUBLIC UTILITIES COMMISSION.

The public utilities commission has held 45 regular meetings, 7 special meetings, and 2 hearings. During the month of August, 1918, the commission made an informal inspection of all utilities under its jurisdiction on the islands of Hawaii and Maui, making examination of the equipment, books, and finances of each utility.

The following orders were adopted during the year:

1. Filing of monthly trial balances by all public utilities or public utility corporations, adopted September 13, 1918.

2. Requiring the Hawaiian Electric Co. (Ltd.) to provide grounds for all of the transformers used by it; providing a test for such grounding, and requiring a monthly report of the work done in connection therewith, adopted June 6, 1919.

On December 31, 1918, there were 26 public utility corporations operating in the Territory. Of this number, 10 were railroad and transportation companies, 5 were telephone companies, 10 were lighting companies, and 1 was a warehouseman. The grand total of capital stock of these companies on December 31, 1918, was \$18,015,399.46, and on December 31, 1917, was \$17,697,760. Their gross income for 1918 was \$6,584,447.99, and for 1917 was \$5,864,263.30.

INDUSTRIAL ACCIDENT BOARDS.

Under an act entitled the workmen's compensation act, the legislature of 1915 created industrial accident boards for the four counties. This has been amended to some extent in the two regular sessions of the legislature since that year.

The Honolulu board received during the year a total of 2,479 reports of accidents. Of these 1,249 involved disability period of less than seven days, which is the waiting period provided under the act, the injured employees being entitled to no compensation benefits other than the costs of medical and hospital services and supplies. The money thus expended amounted to \$11,500, exclusive of the plantations. Of 1,525 employers that have made returns to the board regarding security for compensation payments to their employees, 61 are carrying their own insurance. This latter number includes the city and county of Honolulu, the various departments of the Territorial government and 11 plantations.

Twenty-two accidents resulted fatally, 34 caused permanent partial disabilities, one permanent total disability, 1,172 created total disabilities for periods varying from 10 days to several months. The fatal accidents created 55 dependents who are beneficiaries under the act, including 13 widows, 41 minor children, and 1 dependent father. Compensation awarded on account of death claims amounted to \$43,000. For permanent partial disabilities \$20,681.67 has been paid in compensation. Weekly compensation awarded and voluntarily paid during temporary disability periods amounted to \$18,000.

There were 672 accidents reported to the board of the county of Hawaii during the fiscal year, of which 13 were fatal. A total of 268 firms carried insurance policies, and 11 were granted permission to carry their own insurance.

On the island of Maui there were 538 accidents reported, nine of which were fatal. Total compensation paid to recovered employees was \$4,019.67. Of this amount insurance companies paid \$120.56,

self-insuring firms and individuals the remainder. Compensation being paid as death benefits amounts to \$82.36 monthly by insurance companies and \$178.08 monthly by self-insuring concerns. Periodical payments for amputation, etc., now being made are \$27.68 by insurance companies monthly and \$183.55 otherwise.

LOAN FUNDS.

PUBLIC IMPROVEMENTS.

Construction of the North Kona Road, Hawaii, under contract of \$48,265.56 began in April of this year, and on June 30, the work was 17 per cent complete. This is a 16-foot graded road, with an asphalt macadam pavement 10 feet wide, extending from the boundary of Holualoa to the Honokahau School, a distance of 2,450 feet. The pavement is 3½ inches thick. All grades are less than 6 per cent.

Construction of the Kau-South Kona Road began in March, 1919, and on June 30 the work was 18 per cent complete. The contract price is \$49,441.53.

Five bridges have been completed from the appropriations provided by the special session of the legislature in 1918. A sixth is nearing completion, and several others have been repaired.

The first section of the Volcano Road was completed on June 16, 1919, and opened to traffic on June 30, 1919. This section is 17,347 feet in length and 18 feet wide. The contract price was \$148,214.43. The road is of concrete with an asphalt coating. The opening of this section eliminates one of the worst parts of the ride from Hilo to the Volcano.

The Olinda Reservoir on Maui was completed during the period.

LOAN FUND COMMISSIONS.

All of the activities of the various loan fund commissions provided by the loan fund act of the 1911 legislature have been completed with the exception of the Keamoku Road on Hawaii, which is under the supervision of the Hawaii loan fund commission. Work on this road has progressed well during the year. The legislature of 1919 provided \$75,000 for its completion and \$175,000 for the Hilo waterworks. No funds are available to date, as none of the bonds have been sold.

SCHOOLS.

At the end of the fiscal period the number of pupils enrolled in the public schools was 36,102, an increase of 5.1 per cent over the previous year.

The following table shows the percentage of attendance for the last three years:

Island.	June, 1917.	June, 1918.	June, 1919.
Oahu.....	94.9	94.9	94.5
Kauai.....	95.2	94.0	95.0
Hawaii.....	94.2	92.4	93.8
Maui.....	88.6	90.4	92.4
Molokai.....	94.3	93.0	93.1
Total.....	93.4	93.1	93.7

Table of increase for last five years.

Year.	Enroll- ment.	Increase.
		<i>Per cent.</i>
June, 1915.....	28,827	6.8
1916.....	30,206	4.7
1917.....	32,282	6.9
1918.....	34,343	6.4
1919.....	36,102	5.1

Expenditures for public schools, by fiscal years, since organization of territorial governments.

Fiscal year.	Schools.	Teachers.	Pupils.	Maintenance.	New buildings.	Per pupil.	
						Mainte- nance.	Total.
1901.....	140	352	11,501	\$358,925.72	\$8,773.37	\$31.20	\$31.97
1902.....	143	380	13,189	364,374.72	12,121.54	27.63	28.55
1903.....	144	386	13,793	393,502.64	10,411.02	28.52	29.28
1904.....	147	399	14,467	409,048.84	96,513.71	28.27	34.94
1905.....	154	414	15,202	336,358.50	267,387.12	22.12	39.05
1906.....	151	435	16,119	361,458.99	61,270.87	22.42	26.22
1907.....	153	441	17,138	349,933.14	75,169.88	20.41	24.80
1908.....	154	476	18,564	467,555.06	88,932.17	25.18	29.97
1909.....	153	493	19,507	446,832.60	86,075.94	22.90	27.31
1910.....	152	486	19,909	470,176.08	14,410.41	23.61	24.34
1911.....	155	523	20,597	479,351.19	4,243.41	23.27	23.48
1912.....	156	582	23,752	630,334.65	92,577.92	26.53	30.43
1913.....	161	674	25,631	677,799.72	268,741.78	26.44	36.93
1914.....	168	713	26,990	742,310.63	77,208.85	27.50	30.36
1915.....	170	735	28,827	772,146.88	69,441.42	26.79	29.20
1916.....	171	804	30,206	899,501.33	127,271.01	29.78	33.99
1917.....	168	855	32,282	898,047.78	91,209.88	27.81	30.63
1918.....	168	967	34,343	1,079,693.16	173,805.20	31.43	36.49
1919.....	168	1,063	36,102	1,206,924.32	167,910.49	33.43	38.08
Total.....				11,344,276.03	1,783,475.99		

SUMMARY.

	Schools.	Teachers.			Pupils.		
		Male.	Female.	Total.	Male.	Female.	Total.
Public schools.....	168	127	936	1,063	18,968	17,114	36,102
Private schools.....	61	67	303	370	4,126	3,043	7,169
Total.....	229	194	1,239	1,433	23,114	20,157	43,271

Comparative table, by nationality, of pupils attending all schools in the Territory, June 30, 1919.

Nationality.	Public.	Private.	Total.
Hawaiian.....	3,177	623	3,800
Part Hawaiian.....	3,940	1,421	5,361
American.....	898	1,067	1,965
British.....	97	65	162
German.....	118	40	158
Portuguese.....	5,073	1,261	6,334
Japanese.....	16,295	1,251	17,546
Chinese.....	3,465	1,026	4,491
Porto Rican.....	1,075	64	1,139
Korean.....	446	174	620
Spanish.....	470	43	513
Russian.....	61	35	116
Filipino.....	836	67	903
Other foreigners.....	131	42	173
Total.....	36,102	7,169	43,271

Percentage of enrollment by descent, June 30, 1919.

Descent.	Percentage of 43,271 pupils in all schools June 30, 1919.			Percentage of 36,102 pupils in public schools June 30, 1919.	Increase public schools, 1918-19.		Decrease public schools, 1918-19.	
	Public.	Private.	All.		Number.	Per cent.	Number.	Per cent.
Hawaiian.....	7.34	1.44	8.78	8.80	.....	.....	39	27.06
Part-Hawaiian.....	9.11	3.29	12.40	10.91	135	7.11	.....	.....
American.....	2.06	2.44	4.52	2.40	49	2.58	.....	.....
British.....	.22	.15	.37	.27	.....	.....	11	7.90
German.....	.27	.09	.36	.33	.....	.....	8	5.68
Portuguese.....	11.72	2.92	14.64	14.05	72	3.79	.....	.....
Japanese.....	37.66	2.89	40.55	45.14	1,194	62.84	.....	.....
Chinese.....	8.01	2.37	10.38	9.50	160	8.42	.....	.....
Porto Rican.....	2.49	.14	2.63	2.98	43	2.26	.....	.....
Korean.....	1.03	.40	1.43	1.24	37	1.95	.....	.....
Spanish.....	1.09	.09	1.18	1.30	.....	.....	19	13.48
Russian.....	.19	.08	.27	.22	.....	.....	44	31.20
Filipino.....	1.98	.16	2.09	2.32	210	11.05	.....	.....
Other foreigners.....	.31	.09	.40	.36	.....	.....	20	14.18
Total.....	83.45	16.55	100.00	100.00	1,900	100.00	140	100.00

COLLEGE OF HAWAII.

At the beginning of the year virtually all of the men students were enrolled in the Student Army Training Corps of 63 members. After its demobilization in December 18 withdrew, one transferred to another college, two became special students, and the rest became regular students. By some readjustments they were able to complete the work of the year. Men who had been in the Army began returning after January 1, and special consideration was given toward reestablishing with a minimum loss of time. It is clear that the military experience has had much educational value.

The course in sugar technology has been placed on a better basis by an arrangement whereby students are enabled to work at the experiment station of the Hawaiian Sugar Planters' Association and at the factory of Kahuku Plantation.

Five students received degrees at the eighth annual commencement. The first two honorary degrees in the history of the college were conferred.

Total registration for the year was 145, of whom 68 were studying for degrees. By classes these latter were: Graduate 1, seniors 5, juniors 6, sophomores 16, freshmen 40.

Geographical distribution of students was as follows: Oahu 118, Hawaii 12, Kauai 4, Maui 6, Japan 2, China 1, California 1, Michigan 1.

BOARD OF INDUSTRIAL SCHOOLS.

There are two industrial schools under the supervision of the board—one for boys, situated at Waialeale, on the northern shore of the island of Oahu, and one for girls at Moliili, a suburb of Honolulu. These institutions at present receive and care for all of the juvenile delinquents, who are not paroled or put on probation by the juvenile court in Honolulu or the circuit judges of the outside islands, who also act as juvenile judges. Instruction at these schools is chiefly of a vocational nature, and the children receive a portion of their earnings.

Boys' school.—The school is ideally located. The grounds consist of about 700 acres, of which 550 are tillable, the remainder being mostly pasture land. There were 143 boys in the school at the end of the fiscal year, the ages ranging from 8 to 20 years. There are 9 boys from 8 to 10 years old; 19 from 10 to 12; 36 from 12 to 14; 35 from 14 to 16; 13 from 16 to 18; and 21 from 18 to 20.

Of the 116 boys received during the year, 40 were native Hawaiians; 19 part Hawaiians; 26 Portuguese; 9 Chinese; 9 Japanese; 2 Filipinos; 1 Korean; 3 Porto Ricans; 5 Russians; 1 Spaniard; and 1 American.

Girls' school.—The number of girls in the school at the end of the year was 114, against 128 for the same period the previous year. There were 40 girls admitted during the period, 13 returned from parole, 30 released, and 37 placed on parole.

Vocational work was continued, including the making of Hawaiian tapa cloth and ti leaf sandals. Much outdoor recreation is enjoyed, and the health of the girls is good. Regular religious services are a part of the school life.

As a war measure the girls worked in a local pineapple cannery last summer, and with a part of the money thus earned bought a \$1,000 Liberty bond.

LIBRARY OF HAWAII.

Registration at the end of the year was 8,957, an increase of 760 over the previous year. The home use of books totaled 115,518, which is greater by 7,641 than that of the previous period. Of those holding cards, 54.2 per cent are adults and 45.8 per cent children.

Visitors to the reading and reference rooms totaled 51,800, or 1,980 less than the year previous.

The number of books in the library is 41,860, or a net increase of 4,440.

In the children's department special effort has been made to join the library closer to the school. Library instruction has been given to all grammar grades above the fourth, and the children taught to use the catalogue and ordinary reference books. There has been a notable gain in attendance of children at the library, and in the quality of reading of those who have had the training.

The islands' department has increased its stations from 163 to 224, of which 57 are community libraries, 79 school libraries, and 88 home libraries. Books and magazines sent out numbered 17,178.

The library holds an important place as a social center, there being 291 meetings of various kinds held there during the year.

ARCHIVES OF HAWAII.

Indexing of the correspondence of the former interior department, relating to land matters, which was discontinued May 31, 1918, on account of the clerk who was engaged on it being called into active service with the National Guard, was resumed September 9, 1918, and has progressed to May, 1866. This work will be continued during the coming year.

The records of the second circuit court, which were filed in the archives in May, 1918, have all been indexed and a copy of the same furnished the clerk of that court. The records of this circuit and of

the third and fourth circuits which were previously indexed can now be immediately referred to, which was not the case previous to their removal to the archives. The indexing of important matters in the bound volumes of newspapers on file has been finished up to September, 1904. This index begins with the year 1836, and has proved of great value.

Much information on a variety of subjects, official and historical, has been furnished the departments and the general public.

There was compiled, by the librarian, a "Roster of the legislature of Hawaii" from 1841 to and including the session of 1919. This book of 300 pages contains not only a list of members of the different sessions, but also the several constitutions of the Kingdom of Hawaii, and that of the Republic, the speeches of the monarchs from Kamehameha III to Liliuokalani, and of the President to the legislature, and an alphabetical list of members during the period mentioned, giving individual records. A historical sketch of the evolution of the legislature since the creation of a law-making body, by proclamation of the King in 1829, forms the preface. The work was published in February, 1919, as publication No. 1, of the archives of Hawaii, and given wide distribution both in Hawaii and on the mainland. It has met with a very favorable reception and has been highly commented on by a number of State and law librarians.

Work on the revision of the Hawaiian Dictionary was continued. Act 18, session laws of 1913, put this work under the direction of the archives commission. Act 123, session laws of 1919, provides that all future work shall be done by a commission of three persons, to be appointed by the governor upon the recommendation of the commissioners of public archives, said commissioners to continue the supervision of the work.

THE COURTS.

The report of the chief justice of the supreme court shows a notable decrease in crime throughout the Territory during the calendar year 1918. Among the Hawaiian and Part-Hawaiians, the number of convictions was but 782, as compared with 1,076 convictions in 1917. Considering population for each year, this is a decrease of 77 per cent. Among the Chinese convictions dropped from 5 per cent to 3.64 per cent; Japanese from 3.19 per cent to 2.37 per cent; whites, including Portuguese, from 1.75 per cent to 1.70 per cent; and other races from 11.52 to 8.13 per cent.

The per cent for all races dropped from 4.84 to 2.93. In other words, a population of 256,180 in 1917 included 10,301 persons convicted of crimes, while a population of 263,666 in 1918 included only 7,732 convicted persons, or an actual decrease of 2,569.

TERRITORIAL COURTS.

The Territorial courts are composed of a supreme court of 3 members; 5 circuit courts, of which 1 has 3 members who sit separately, and the others 1 member each; and 29 district courts. The supreme court and circuit court judges are appointed by the President and the district magistrates by the chief justice of the Territory. The circuit courts are the courts of general original jurisdiction. They try criminal, law, equity, probate, and divorce cases. The first

circuit court also acts as a court of land registration. The circuit and district courts also acts as juvenile courts, the principal juvenile court being presided over by one of the judges of the first circuit court.

The following tables show the cases by courts, classes of cases, and nationality of convicted in criminal cases.

Court statistics, calendar years.

TOTAL CASES IN ALL COURTS.¹

	1916	1917	1918
Criminal cases	12, 131	14, 455	11, 469
Civil cases	3, 066	4, 525	4, 744
Total	15, 197	18, 980	16, 213
Convictions in criminal cases	9, 572	10, 305	7, 748
Percentage of convictions	77	71	67

¹ 97 insanity, 308 juvenile court cases not included.

CASES CLASSIFIED BY COURTS.

Supreme court	83	84	82
Circuit courts	1, 544	2, 139	2, 499
District courts	13, 570	16, 757	13, 632
Total	15, 197	18, 980	16, 213

CASES IN SUPREME COURT.

On appeal, error, or exceptions:			
Law	26	34	27
Equity	15	16	20
Divorce	4	8	.....
Probate	3	9	2
Criminal	17	1	10
Original	6	2	5
Miscellaneous	12	19	18
Total	83	84	82

CASES IN CIRCUIT COURT.

Civil:			
Law	290	297	253
Equity	64	122	169
Divorce	407	434	653
Probate	341	508	561
Miscellaneous	2	8	8
Total	1, 104	1, 369	1, 644
Criminal	440	770	855
Grand total	1, 644	2, 139	2, 499
Convictions in criminal cases	288	339	432
Percentage of convictions	74	44	50

CASES IN DISTRICT COURTS.

Civil	1, 896	3, 081	3, 028
Criminal	11, 674	13, 676	10, 604
Total	13, 570	16, 757	13, 632
Convictions in criminal cases	9, 284	9, 966	7, 316
Percentage of convictions	79	72	68

*Court statistics, calendar years—Continued.*RACES OF PERSONS CONVICTED.¹

Races.	Estimated population, June 30, 1919.	Number convicted, 1919.	Per cent of population convicted, 1919.
Hawaiian and Part Hawaiian.....	39,260	782	1.99
Chinese.....	22,800	831	3.64
Japanese.....	110,000	2,538	2.37
White (including Portuguese).....	56,000	684	1.70
Others.....	35,606	2,897	8.13
Total.....	263,666	7,732	2.93

¹ Sixteen corporations were convicted for "failure to file annual exhibits" not included in the total of "nationality of persons convicted."

CONVICTIONS IN CRIMINAL CASES BY CLASSES OF CASES.

	1916	1917	1918
Offenses against property.....	461	492	517
Offenses against chastity.....	422	278	359
Offenses against the peace.....	1,045	964	626
Gambling.....	5,012	6,010	4,009
Liquor selling, etc.....	148	97	46
Drunkennes.....	802	661	399
Homicide.....	13	13	17
Miscellaneous.....	1,674	1,800	1,725
Total.....	9,572	10,305	7,748

¹ Homicide, 1917: Manslaughter, 2; murder, 11. Homicide, 1918: Manslaughter, 2; murder, 5.

JUVENILE COURT.

The principal court handling juvenile cases is located in Honolulu and presided over by one of the circuit judges of the first circuit, who is assigned for that purpose by the chief justice of the supreme court. The circuit judges of the other circuits, and to a small extent the district magistrates throughout the Territory sit as juvenile judges. There are several salaried officers and a number of volunteers.

Dependents are placed in private homes, private institutions and public institutions by the juvenile court judges. Delinquent boys and girls, not paroled, are placed in the respective industrial schools where their work is of a vocational nature and partly self-sustaining.

During the year there were brought before the Honolulu court 346 boys and 62 girls, as follows: Assault and battery, 18 boys and 1 girl; curfew, 2 boys and 1 girl; disobedience, 34 boys and 26 girls; gambling, 30 boys and 1 girl; idleness, 6 boys and 1 girl; larceny and kindred offenses, 114 boys and 7 girls; truancy, 79 boys and 10 girls; bastardy, 9 boys; other offenses, 54 boys and 15 girls.

Three hundred and one boys and 50 girls were declared delinquents; 41 boys and 12 girls were dismissed; 231 boys and 33 girls were placed on probation, and 68 boys and 17 girls committed to the industrial schools.

The nationality of the delinquents was as follows: Chinese, 59; Filipino, 4; Hawaiian, 125; Japanese, 50; Korean, 3; Porto Rican, 4; Russian, 5; Spanish, 1; white, including Portuguese, 70; and others, 30.

Of 57 boys and 56 girls brought before the court as dependents, 56 boys and 54 girls were so declared. Forty-four of these cases were sent to private homes, 60 to charitable institutions, and 5 to the industrial schools.

Hawaiian children led the list of dependents with 35; white, including Portuguese, 24; Chinese, 15; Filipino, 11; Russian, 4; Korean, 3; Japanese, 2; Porto Rican, 1; Spanish, 2; and others, 15.

LAND COURT.

One of the judges of the first circuit is assigned to land court cases by the chief justice of the supreme court.

During the fiscal year 34 applications were filed while 37 applications were pending at the beginning of the period. Of this total of 71 cases, 35 were granted and decrees were issued, one was discontinued and one was denied. There were 34 cases pending at the end of the fiscal year. The 71 cases listed represent 14,627.406 acres with an assessed value of \$773,521.77. The 35 cases where decrees were issued represented 5,616.34 acres; assessed value \$295,520; pending cases, 8,159.269 acres at a value of \$475,095.77.

FEDERAL COURT.

The Federal court located in Hawaii is a United States district court, with the jurisdiction also of a United States circuit court. There are two district judges, and a United States district attorney and assistant affiliated with this court.

The civil cases during the last fiscal year numbered 81, comprising 30 bankruptcy, 19 admiralty, 24 United States civil, 4 other civil, and 4 habeas corpus cases, as compared with 67 cases for the preceding year, comprising 31 bankruptcy, 11 admiralty, 2 United States civil, 5 other civil and 18 habeas corpus cases.

Criminal cases numbered 260 as against 209 for the previous year, accounted for as follows: Unlawfully importing, etc., opium, 30; adultery, 1; violation of white slave traffic act, 3; illicit distilling, 2; violation of tariff act of October 3, 1913, 12; violation of postal laws, 1; selling intoxicating liquors to members of United States Army, 3; espionage, 1; keeping bawdy house, 1; entering house of assignation, etc., 18; violation of Sheppard Act, 184; murder, 2; post-office larceny, 1; bigamy, 1.

Convictions to the number of 249 were secured in the criminal cases, 1 was acquitted, 3 cases nolle-prossed, and 7 cases are pending.

ATTORNEY GENERAL'S DEPARTMENT.

The attorney general is the legal adviser of the heads of the departments, the high sheriff, the district magistrates, other public officials in all matters connected with their public duties, and the many Territorial boards. Much of this work consists of drawing up or passing upon forms of contracts and bonds of contractors with the Territory, deeds, licenses, patents, and other documents relating to land transactions, corporation charters, etc. The nature of this work prevents its being reported in detail, as it is as broad and varied as the work of the several departments.

During the year the department handled 1 case in the United States district court; 4 in the supreme court; 49 in the circuit courts; 15 in the tax appeal court; 22 in the land court; 13 in the district court of Honolulu, or a total of 104 cases.

Of these cases 3 are still pending in the supreme court, 45 in the circuit courts, 21 in the land court, 12 in the district court of Honolulu, and 7 in the tax appeal court, or a total of 88 cases pending.

Disposition of criminal cases in all circuit courts of the Territory.

Court circuit.	Persons convicted.	Persons acquitted.	Cases nolle-prossed.	Stricken cases.	Pending cases.	Total cases.	Total disposed of.
First.....	114	19	119	2	168	422	354
Second.....	27	10	4	.....	18	61	43
Third and fourth.....	39	1	1	.....	.....	44	44
Fifth.....	13	1	4	1	1	20	19
Total.....	193	31	128	3	187	547	460

TERRITORIAL PRISON.

All felons, all Federal prisoners, both misdemeanants and persons awaiting trial, as well as felons, are retained in the Territorial prison. The warden of the prison is also sheriff of the Territory.

The total of days' imprisonment for the fiscal year was 249,693, divided into 249,140 criminal and 553 committal. This is an average of 684 criminal prisoners and 2 committed persons a day throughout the year. During the previous year the daily average was 622 and 9, respectively. The increased daily average was 55 persons.

The daily average sick was 1.53 per cent.

Total expenses were \$95,858.85, of which \$27,676.20 was for guards, lunas, and physicians and \$68,182.65 for maintenance. The average cost for support, maintenance, and custody per prisoner each day was 66 cents.

During the year 223 persons were discharged from custody. Of these 97 were discharged because of expiration of sentences, 52 took the poor convicts' oath, 19 were pardoned, and 23 paid fines and costs.

PUBLIC HEALTH.

An analysis of the morbidity and mortality statistics shows an increase of 41 in the number of deaths and of 12,577 in the number of contagious diseases as compared with the previous year. The large increase in contagious diseases is due to the epidemic of influenza, which was made a reportable disease by resolution of the board of health on October 21, 1918. In view of the fact that the deaths from influenza number 612 and the total of deaths increased but 41 over the fiscal year ending June 30, 1918, the health of the Territory may be considered to have been good, and the percentage of deaths, especially from influenza, much less than in most communities on the mainland.

Thanks is due to the Medical Department of the United States Army for the willing and efficient assistance during the influenza epidemic.

VITAL STATISTICS.

From available data the population of the Territory is estimated to be approximately 263,666, divided according to nationality and counties as shown in the following tables:

Nationality.	Popula- tion.	Nationality.	Popula- tion.
American.....	31,000	Asiatic-Hawaiian.....	5,900
British.....		Portuguese.....	25,000
German.....		Caucasian-Hawaiian.....	10,780
Russian.....		Porto Rican.....	5,400
Chinese.....	22,800	Spanish.....	2,400
Filipino.....	22,000	Others.....	706
Hawaiian.....	22,600		
Japanese.....	110,000		263,666
Korean.....	5,000		

City or county.	Popula- tion.	City or county.	Popula- tion.
Honolulu.....	78,200	Kauai.....	31,500
Oahu (outside of Honolulu).....	43,000	Kalawao.....	606
Hilo.....	11,000		
Hawaii (outside of Hilo).....	60,270		263,666
Maul.....	39,000		

The following tables give statistics as to deaths:

Deaths by cities or counties.

City or county.	Total deaths.	Death rate.
Honolulu.....	1,501	19.19
Oahu (outside Honolulu).....	563	13.10
Hilo.....	266	24.18
Hawaii (outside Hilo).....	663	11.00
Kalawao.....	66	94.83
Kauai.....	460	14.29
Maul.....	542	13.90
Total.....	4,051	15.36

Deaths by nationality.

Nationality.	Total deaths.	Death rate.	Nationality.	Total deaths.	Death rate.
American.....	194	6.26	Asiatic-Hawaiian.....	86	14.58
British.....			Caucasian-Hawaiian.....	174	16.17
German.....			Portuguese.....	312	12.48
Russian.....			Porto Rican.....	74	13.70
Chinese.....	322	14.12	Spanish.....	23	9.58
Filipino.....	408	18.55	Others.....	25	35.41
Hawaiian.....	891	39.42	Total.....	4,051	15.36
Japanese.....	1,469	13.35			
Korean.....	73	14.31			

Principal causes of death.—The 15 principal causes of death amounted to 3,131 or 77.29 per cent of all the deaths in the Territory.

Cause.	Total deaths.	Rate per 1,000 of population.	Cause.	Total deaths.	Rate per 1,000 of population.
1. Influenza.....	612	2.32	10. Bronchitis (acute and chronic).....	81	0.31
2. Diarrhea and enteritis.....	512	1.95	11. Beriberi.....	61	.23
3. Tuberculosis (all forms).....	482	1.83	12. Leprosy.....	60	.23
4. Pneumonia (all forms).....	379	1.44	13. Syphilis.....	55	.21
5. Premature birth, congenital debility and other causes peculiar to early infancy.....	219	.83	14. Whooping cough.....	44	.17
6. Organic diseases of the heart.....	178	.68	15. Congenital malformations.....	40	.15
7. Cancer (all forms).....	150	.57			
8. Bright's disease.....	133	.50	Total.....	3,131	11.87
9. Cerebral hemorrhage, apoplexy.....	123	.47			

INFANT MORTALITY.

The total number of deaths under 1 year of age was 1,077, a decrease of 281 over the previous year. This is a death rate of 117.53 per 1,000 births.

Five main causes of deaths of infants under 1 year.

Cause.	Total deaths.	Death rate per 1,000 births.
Diarrhea and enteritis.....	365	39.83
Premature birth, congenital debility, etc.....	218	23.79
Pneumonia.....	156	17.02
Acute bronchitis.....	51	5.57
Influenza.....	51	5.57

The total number of deaths under 5 years of age was 1,446, a decrease of 271 from the previous year. Of all deaths in the Territory 35.7 per cent occurred under 5 years of age.

During the year there were 312 stillbirths, a decrease of 5 from the previous year. The Japanese reported 151 stillbirths, the largest number reported by any nationality.

The largest number of deaths occurred during the months of July, 1918, and February and March, 1919. The smallest number occurred in October and September, 1918, and June, 1919. The first epidemic of influenza was in July, 1918.

BIRTHS.

The total number of births reported to the office of the registrar general was 9,164, a decrease of 240 as compared with the number reported the preceding year. There were 584 unrecorded births. The birth rate per 1,000 of population was 34.76 as compared with 36.71 for the previous year. No doubt there are many residents who still fail to comply with the law regarding the registration of births. The largest number of births was reported in July, 1918, and January and March, 1919; the smallest number in August, 1918, and May and June, 1919. The increase of births over deaths was 5,353 or 12.62 per cent.

There were 51 cases of twin births.

The following tables give the births and rate per thousand by counties, also the nationalities.

Births by counties.

City or county.	Total births.	Birth rate.
Honolulu.....	3,099	39.63
Oahu (outside of Honolulu).....	1,503	34.95
City of Hilo.....	362	32.91
Hawaii (exclusive of Hilo).....	1,800	30.86
Kalawao.....	15	21.55
Kauai.....	1,003	31.84
Maul.....	1,322	33.90
Total.....	9,164	34.76

Births by nationalities.

Nationality.	Total births.	Birth rate.
American.....	400	12.90
British.....		
German.....		
Russian.....		
Chinese.....	717	31.45
Filipino.....	470	21.36
Hawaiian.....	659	29.16
Japanese ¹	4,391	39.92
Korean.....	175	34.41
Asiatic-Hawaiian.....	398	67.46
Caucasian-Hawaiian.....	603	56.04
Portuguese.....	950	38.00
Porto Rican.....	249	46.11
Spanish.....	126	52.50
Others.....	26	34.83
Total.....	9,164	34.76

¹ Total number of births reported to the Japanese consulate is 4,807, or 416 more than reported to this department.

MARRIAGES.

The total marriages reported in the Territory during the past year was 2,015, a decrease of 557. The number of marriages has decreased in all districts. The annual marriage rate was 7.64 per 1,000 as compared with 10.04 for the previous year.

Following is a table of marriages by counties:

City or county.	Total marriages.	Marriage rate.
Honolulu.....	1,177	15.05
Oahu (outside of Honolulu).....	131	3.05
City of Hilo.....	169	15.36
Hawaii (exclusive of Hilo).....	153	2.62
Kalawao.....	13	18.68
Kauai.....	148	4.70
Maul.....	219	5.62
Total.....	2,015	7.64

The months having the largest number of marriages were August, September, and October, 1918, while those having the smallest number were January, February, and March, 1919.

MORBIDITY STATISTICS.

There were 14,616 cases of contagious diseases reported, an increase of 12,577 over the previous year. Tuberculosis, leprosy, and measles increased in numbers, while others decreased.

No case of bubonic plague was reported this year. The number of cases of typhoid fever decreased 50 per cent.

The cases of contagious diseases occurring on each island were as follows: Oahu, 4,882; Maui, 4,906; Hawaii, 1,916; Kauai, 2,877; Molokai, 35.

The following is a summary of the contagious, infectious, or communicable diseases reported during the fiscal year:

Diseases reported (all islands):

Cerebrospinal meningitis.....	14
Diphtheria.....	133
Enteric (typhoid) fever.....	135
Fever, paratyphoid.....	1
Influenza.....	12,499
Leprosy.....	110
Measles.....	411
Pertussis.....	34
Scarlet fever (or scarlatina).....	11
Tetanus.....	14
Trachoma.....	132
Tuberculosis.....	1,017
Varicella.....	91
Variola.....	14
Total.....	14,616

Besides the diseases here mentioned, the list of contagious, infectious, and communicable diseases recognized by the Territorial board of health includes the following, none of which were reported during the year: Cholera, Asiatic; conjunctivitis, follicular; dengue; dysentery, amebic; paralysis, infantile; plague; typhus fever; varioloid; yellow fever.

SANITARY ENGINEER.

Bacteriological analyses of the Nuuanu water, Honolulu, have been regularly made and used in testing the efficiency of the chlorination plant operated by the city. Improvements at the various institutions were looked after by this department. A map showing the town site of Wahiawa and the reservoir was prepared in connection with solving the sewerage problem of that town.

SANITATION.

Oahu.—With Hawaii's cosmopolitan population, sanitation is largely a process of education. The tenement work on Oahu is progressing well, and another year should see most of the objectionable tenements removed.

The mosquito census was continued, and the following table gives the result:

Percentage of species for the year.

Number of specimens examined.....	5,230
<i>Culex fatigans</i>	per cent.. 62.2
<i>Stegomyia calopus</i>	do... 7.5
<i>Stegomyia scutellaris</i>	do... 30.3

Building permits issued during the year were 1,285, and the estimated cost of the buildings and improvements covered by those permits was \$1,925,338.27.

At the Hilo quarantine station, island of Hawaii, there were 25 leper suspects and 6 kokuas, 14 cases of influenza, 14 cases of influenza-pneumonia, 7 diphtheria cases, and 9 contacts. The fish inspector for that island reports 863,951 fish inspected and 56 destroyed.

RAT CAMPAIGN.

Oahu.—We have continued the rat campaign under the supervision of the United States Public Health Service. Surg. F. E. Trotter, chief quarantine officer, reports the number of rats, mice, and mongoose taken as 16,870, an increase of 595 over the preceding year. All were examined and found free from plague. The legislature of 1919 increased the appropriation for this work from \$20,000 to \$24,000. The United States Public Health Department rendered valuable assistance during the past year in handling influenza and other contagious diseases.

Hawaii.—This work has been diligently prosecuted, as in previous years. Valuable financial assistance was given by the shippers' wharf committee of Hilo. In addition to the Government force the plantations employed rat catchers. Only one infected rat was found, a decrease of 19 from the previous year. The total of rats taken was 148,978. No case of plague was reported during the year.

GOVERNMENT PHYSICIANS.

There were 25 Government physicians employed, their work being as follows: House visits, 9,733; office calls, 8,476; prescriptions filled, 13,278; number of school children examined (exclusive of Honolulu), 14,201; health certificates refused, 46; children vaccinated, 4,677; post-mortems performed, 107; miles traveled, 25,569. The cost to the Territory for their services was \$22,590 in salaries, \$4,304.51 for medicines, including that furnished schools, and \$820.75 for vaccine virus.

MEDICAL INSPECTION OF SCHOOLS.

During the year 10,793 pupils attending the Honolulu schools were examined, weighed, and measured according to the standard approved by the Children's Bureau, Department of Labor, Washington, D. C. Of this number 3,310 children of all nationalities were found underweight by from 5 to 25 pounds. Many of these underweights were raised to normal after interest had been created among parents, teachers, and the children themselves, in addition to which the school kitchens were of assistance. Nine cases of spinal curvature and many stooped shoulders and hollow chests were found, caused by children sitting at desks too small for them.

Other principal defects in Honolulu school children were as follows: Trachoma, requiring operation, 198; trachoma, minor grade, about 325; conjunctivitis, 348; blepharitis, 39; needing glasses, 199; blind (in one eye), 12; styas, 31; miscellaneous defects, 23; unhealthy tonsils and adenoids, 3,819; postpharyngeal catarrh, 42; nasal

obstruction, 30; miscellaneous defects, 186; defective second teeth (number of children), 5,229; gingivitis, 1,082; abscesses, 259; discharging ear, 36; defective hearing, 17; miscellaneous defects, 9; tuberculosis suspects, 181; deformities, rickets, etc., 71; heart disease, 38; pediculosis capitis, 634; scabies, impetigo, etc., 399; cervical adenitis, 443; vaccinated, 2,410; miscellaneous, 108.

There were 4,408 pupils in the 18 schools outside of Honolulu. Insanitary conditions in several of these buildings were reported. Vaccination in the country districts was done by the Government physicians.

The following is a summary of the principal defects found: Trachoma, operative, 81; trachoma minor, 292; conjunctivitis, 134; blepharitis, 4; needing glasses, 44; styas, 13; miscellaneous defects, 10; unhealthy tonsils and adenoids, 1,873; postpharyngeal catarrh, 8; nasal obstruction, 9; miscellaneous defects, 44; defective teeth (number of children), 1,927; gingivitis, 270; abscesses, 77; miscellaneous defects, 11; discharging ear, 16; defective hearing, 4; tuberculosis suspects, 5; cervical adenitis, 76; miscellaneous defects, 40.

Much dental work among school children was done by doctors regularly employed for this purpose.

ANTITUBERCULOSIS BUREAU.

Tuberculosis increased both in the number of cases reported and deaths. There were reported 1,017 new cases, an increase of 80 over the previous year, while the deaths increased by 16. One reason for this increase in new cases reported was the draft examination. The epidemic of influenza also precipitated many cases of tuberculosis. Thirty-two children suspected of having tuberculous were sent to the Pa Ola Day Camp by this bureau, and 147 tuberculous adults and children were sent to Leahi Home. On Oahu there were 48 deaths from tuberculosis among children between the ages of 1 and 19 years and in all the islands 99 of such deaths. The 482 deaths were divided among the different nationalities as follows: American, 9; British, 5; Chinese, 55; Filipino, 53; German, 1; Hawaiian, 119; Japanese, 155; Korean, 17; part Hawaiian, 37; Portuguese, 20; Porto Rican, 5; Russian, 3; Spanish, 1; other, 2.

There were 1,017 new cases reported, of the different forms, as follows: Pulmonary, 905; intestinal, 10; peritoneal, 18; glandular, 13; bone, 20; meningeal, 18; pulmonary and renal, 1; pulmonary and peritoneal, 6; pulmonary and glandular, 3; pulmonary and meningeal, 1; pulmonary and laryngeal, 3; pulmonary and spinal, 2; pulmonary and bone, 1; pulmonary and testicular, 1; glandular and bone, 2; intestinal and meningeal, 1; laryngeal, 5; miliary, 2; pharyngeal, 1; renal, 2; esophageal, 1.

The following is a comparison of cases registered June 30, 1918, and June 30, 1919:

District.	1918		1919	
	Male.	Female.	Male.	Female.
Honolulu.....	309	114	291	141
Oahu (outside of Honolulu).....	40	29	87	31
Hawaii.....	88	41	135	37
Maua.....	154	68	156	69
Kauai.....	141	57	159	62
Total.....	633	309	828	340
Nationality:				
Hawaiians and part Hawaiians.....	106	117	148	126
Asiatics.....	405	117	550	126
Portuguese.....	57	49	58	52
Other Europeans.....	32	18	37	24
All others.....	32	8	35	12
Total.....	632	309	828	340
Ages:				
From 0 to 9 years.....	40	35	45	41
From 10 to 19 years.....	88	90	106	107
From 20 to 29 years.....	211	97	208	95
From 30 to 39 years.....	140	51	188	33
Over 40 years.....	153	36	181	64
Total.....	632	309	828	340
Under supervision.....	470	244	638	276
Not under supervision.....	162	65	190	64
Total.....	632	309	828	340

One of the most serious problems facing this Territory to-day is that of tuberculosis, which continues to increase steadily despite a constant fight by the antituberculosis bureau. The 1919 legislature appropriated nearly 100 per cent more money for the present period than was had for the last two years.

PURE FOOD BUREAU.

This bureau has done much toward making the restaurants more careful in the quality of the food served, as well as dealers in general lines of foodstuffs sold.

INSANE ASYLUM.

At the end of the fiscal year, June 30, 1918, there were under treatment in the institution, paroled, and escaped, 251 males and 94 females, a total of 345. There were admitted during this year 84 males and 33 females, a total of 117. A total of 462 patients, 335 males and 127 females, were treated during the year. A total of 34 patients, 22 males and 12 females, were discharged as recovered, and 5 males and 3 females were discharged as improved during the year. For the same period of time 38 deaths occurred, 30 males and 8 females; there remaining in the institution and on parole as of June 30, 1919, 278 males and 104 females, or a total of 382.

LEPROSY.

On June 30, 1919, the number of lepers living at the settlement was 611, an increase of 3 over the previous year. The following tables give the population and nationalities at Kalaupapa and Kalawao:

Population.	Male.	Female.	Total.
Number living at the settlement, July 1, 1918.....	377	231	608
Number received from Kalaupapa Hospital during the year.....	47	13	60
Number received from Lahaina, Maui, examined at settlement and declared a leper.....	1	.....	1
Total.....	425	244	669
Number released on parole.....	1	.....	1
Number of deaths during the year.....	35	23	57
Number remaining in the settlement, June 30, 1919.....	36	22	58
	389	222	611
Nationalities:			
American.....	1	.....	1
Belgian.....	1	.....	1
Chinese.....	24	.....	24
Filipino.....	18	.....	18
German.....	2	2	4
Hawaiian.....	217	146	363
Japanese.....	13	1	14
Korean.....	13	.....	13
Part Hawaiian.....	64	59	123
Portuguese.....	30	14	44
Porto Rican.....	4	.....	4
Spanish.....	1	.....	1
New Hebrides.....	1	.....	1
Total.....	389	222	611

Number of lepers living at different homes.	Male.	Female.	Total.
Bay View Home.....	41	23	64
Baldwin Home.....	99	.....	99
Bishop Home.....	.....	53	53
General hospital.....	21	4	25
McVeigh Home.....	8	3	11
Outside.....	220	139	359
Total.....	389	222	611
Nonleprous children:			
Number living at the nursery, July 1, 1918.....	2	4	6
Number of births during the year.....	7	8	15
Total.....	9	12	21
Number sent to homes in Honolulu.....	3	8	11
Number of deaths during the year.....	1	2	3
Total.....	4	10	14
Number remaining at the nursery, June 30, 1919.....	5	2	7

On July 1, 1918, there were 23 males and 15 females, a total of 38 kokuas at the settlement. During the year 1 male and 2 females were admitted; 1 female was discharged and 3 males and 1 female were removed by death, leaving 21 males and 15 females, or a total of 36 kokuas as of June 30, 1919.

Other well persons living at the settlement were 22 males and 20 females, a total of 42, making a total population of 696 on June 30, 1919; a decrease of 6 over the previous year.

The live-stock inventory shows the Territory owns as of June 30, 1919, 19 horses, 590 head of cattle, 158 pigs, and 30 donkeys.

Baldwin Home.—A new dispensary building was erected, 15 by 15 feet, with concrete floors and necessary fittings. The brothers' resi-

dence was reshingled and all rooms painted. The buildings occupied by patients have been repaired and painted. One hundred feet of picket fence was erected, and new gates with concrete posts installed. During the year Brother Dutton interested the boys in raising vegetables which were purchased and issued as rations at Kalaupapa.

Bishop Home.—It was necessary to make extensive repairs at this home. One of the large dormitory buildings was practically rebuilt and two additional rooms for those who act as guardians of the younger girls were added. The other buildings have all been painted and whitewashed. Heavy concrete posts and gates were erected.

Bay View Home.—The buildings at this home being all new, few repairs were necessary. Six hundred and ten feet of picket fence was erected with large concrete posts at the entrance.

McVeigh Home.—The buildings at this home have been painted, inside and out. A new French range was installed and as a further fire protection a 28-foot concrete smokestack was built.

General.—Necessary repairs have been made to the general hospital, dispensary, visitors' house, and the Kalaupapa store and warehouse. During the year the Territory purchased 448 head of cattle, at a total cost of \$31,530. During the year 63 head of government cattle were killed, and pigs, weighing 9,339 pounds.

Several shortages of taro were experienced. There were purchased during the period 316,783 pounds of taro and 1,144 bags of sweet potatoes. There are now under cultivation 11 acres of taro in Waikolu Valley and 9 acres at Kalaupapa.

Kalihi Hospital.—A circulating hot-water system has been installed. Hot water is now delivered to all the cottages, and at the kitchen the dishes and cooking utensils are thoroughly cleansed by steam.

There has also been established an incipient hospital separate and apart from the main institution. Here any suspicious cases may be treated. With the assistance of the medical profession this will materially help the fight against this disease.

On June 30, 1918, there were 38 patients in the hospital; 125 were admitted during the year; 60 were transferred to Molokai; 10 declared not lepers; 19 were paroled and allowed to return to their homes with orders to report regularly to the Government physician in their district; 5 males and 1 female were removed by death, leaving 65 patients in the hospital on June 30, 1919.

The nationalities of those declared lepers and the districts from which they came are shown in the following tables:

TABLE I.

Nationality.	Examined.			Declared lepers.			Declared not lepers.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
British.....	1	.....	1	1	.....	1	.....	.....	.....
Chinese.....	3	.....	3	3	.....	3	.....	.....	.....
Filipino.....	8	.....	8	6	.....	6	2	.....	2
German.....	1	.....	1	.....	.....	.....	1	.....	1
Hawaiian.....	44	28	72	43	27	70	1	1	2
Japanese.....	5	.....	5	5	.....	5	.....	.....	.....
Part Hawaiian.....	11	12	23	9	11	20	2	1	3
Portuguese.....	5	3	8	5	1	6	.....	2	2
Porto Rican.....	2	.....	2	2	.....	2	.....	.....	.....
Others.....	2	.....	2	2	.....	2	.....	.....	.....
Total.....	82	43	125	76	39	115	6	4	10

TABLE II.

District.	Examined.			Declared lepers.			Declared not lepers.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Honolulu.....	17	18	35	14	15	29	3	3	6
Oahu (outside of Honolulu).....	13	2	15	12	2	14	1	.....	1
Hawaii.....	15	7	22	14	6	20	1	1	2
Kauai.....	5	4	9	5	4	9	.....	.....	.....
Maua.....	31	12	43	30	12	44	1	.....	1
Children of leprous parents ¹	1	.....	1	1	.....	1	.....	.....	.....
Total.....	82	43	125	76	39	115	6	4	10

¹ This case is a boy born at the settlement, 18 years ago, of leprous parents. Shortly after birth he was taken from the settlement by relatives, and resided on Kauai up to July 8, 1918, when he was examined and found to be afflicted with the disease.

Kalihi boys' home.—There are in this home 43 boys, children of leprous parents, their ages ranging from 1 to 19 years. During the year a new building was built to be used as a workshop and laundry. The pavilion formerly used as a play room for the smaller boys was converted into a schoolroom. New beds and other furniture were purchased, and the necessary minor repairs made.

Kapiolani girls' home.—There are at present 68 girls in this home, children of leprous parents.

Resident physician, leper settlement.—Dr. W. J. Goodhue has faithfully performed the duties of resident physician for the past 17 years. Wonderful results have been accomplished through his various treatments. He has performed a number of major and minor operations, and also has charge of the sanitary work at Kalaupapa.

Leprosy investigation station.—The Territory is especially fortunate in having the director in charge of the Federal investigation and laboratory station in Kalihi take charge of the treatment at the Kalihi hospital.

During the year Director Acting Asst. Surg. H. T. Hollman resigned and Dr. J. T. McDonald was appointed. He has continued the work in a very satisfactory and unselfish manner.

President Dean of the College of Hawaii has given valuable assistance in the preparation of chaulmoogra oil. The results of the last year's work are especially gratifying. Twenty patients in all were paroled. Each one has been examined regularly without a recommendation.

The following letters cover in detail the medical and surgical work at Kalaupapa, Molokai, and Kalihi receiving station, Honolulu:

To the president and members of the Territorial board of health, Honolulu, Hawaii.

DEAR SIR AND GENTLEMEN: Herewith I respectfully submit for your consideration a report of the medical and surgical department of the leper settlement for the period ended June 30, 1919.

The mainstay or principal treatment for leprosy in the settlement here still consists of chaulmoogra oil in some one of its forms of administration, although a number of other treatments are given, which will be tabulated in the order of their importance.

Following are noted number of patients on the chaulmoogra-oil treatment:

	Male.	Female.	Total.
(a) Chaulmoogra oil and gualacol comp., hypodermically.....	22	18	40
(b) Chaulmoogra oil and gualacol comp., per oreum.....	55	19	74
(c) Chaulmoogra oil, plain per oreum.....	59	59	118
(d) Chaulmoogra oil, plain inunction.....	8	8	16
(e) Chaulmoogra oil and eucalyptol, and other combinations for inunction.....	7	13	20

With reference to the hypodermic injections it may be noted that these are given twice a week in doses of 5 cubic centimeters to the injection. Average of above hypodermic treatments for the period of this report number 4,216.

Total number of patients on chaulmoogra oil in some form, including hypodermic and inunctional medication, number 304.

The case noted in the previous report on the Varham preparation of chaulmoogra oil, hypodermically, has not progressed satisfactorily, and has been discontinued, the patient refusing to take the treatment any longer. I have given this treatment a faithful trial, and I am much disappointed in my experience with it. This was so highly recommended to me that I hope reports will reach me later on from other fields, giving more satisfactory results than I was able to secure with it.

I hope to be supplied in the near future with some of the acids of chaulmoogra oil, as prepared for medication by Dr. Dean, president of the College of Hawaii, and proving so successful at the Kalihi receiving station.

A new treatment during the past year has been nuclein solution No. 1, hypodermically, and nuclein solution No. 2, per orem. I have had two patients on the above treatment, whom I believe have been decidedly benefited. This preparation is prepared by Messrs. Parke, Davis & Co.

Locally, trichloroacetic acid is used on a great many cases for indurations and nodular thickenings, and other dermic lesions of the disease. Semerak paste and ointment are also very efficacious for the same lesions. CO₂ has been dropped during the period of this report for two reasons. Firstly, because the acid and paste above noted have become more popular with the patients, and, secondly, because the CO₂ was so difficult to obtain in a continuous supply.

Other special and general treatments, tabulated, are as follows:

	Male.	Female.	Total.
Fowler's solution.....	32	6	38
I. Q. S. phosphates with C. L. oil emulsions.....	45	24	69
Angier's petroleum emulsion, plain or with I. Q. S.....	19	20	39
Waterbury's C. L. oil with I. Q. S.....	31	21	52
Scott's emulsion C. L. oil.....	16	19	35
Sajodin.....	1	1	2
Strychnine sulphate.....	5	1	6
K. I.....	8	7	15
Lugol's solution.....	6	14	20

Cases of tonsillar treatments and those for leprous rhinitis as noted in the previous report, still continue to form a large percentage of local treatments. Regular examination of patients for leprous rhinitis is a systematic procedure, especially with reference to the various "Homes," and appropriate treatments for the same, principally through atomization, are given both in the "Homes" and at the dispensary.

Personal calls made by the physician for the period of this report slightly exceed that tabulated on the previous report, owing to the prevalence for a period of three months of a mild epidemic of influenza, which, however, was not the much dreaded Spanish "Flu," as noted below. The mortality did not exceed that resulting from any other ordinary intercurrent ailment.

Baldwin Home, 157; Bishop Home, 286; Bay View Home, 745; hospital, 415; general settlement, 2,294.

Prescriptions filled at Kalaupapa Dispensary, 11,950; at hospital, 904; at Bishop Home, 817; at Baldwin Home, 1,462; aseptic surgical dressings at dispensary, 3,165, at hospital, 5,275; at Baldwin Home, 8,125; at Bishop Home, 6,897; at Bay View Home, 10,960.

Under surgical procedures may be noted the following:

Major operations, 39; minor operations, 312.

In the department of bacteriology may be noted the following:

Various patients snipped weekly and systematically as a check on benefit of different methods of treatment and progress of the disease, number by actual count, 6. Total of such examination for the period, 312.

Other examinations to determine presence, or otherwise, of tuberculosis, number 16. Patients examined number 5, of which only 2 proved positive. Other examinations under this heading for various intercurrent infections number 23.

Milk has been supplied as noted in the previous report to the Bishop and Bay View Homes. Milk has also been supplied to patients outside of the homes, subject to requisition from the attending physician. This valuable adjunct to dietetic treatment of serious cases will have to be discontinued through lack of sufficient pasturage for cattle, dating from June 30, this year.

However, I hope this will only be temporary, the nursery and hospital being the only two institutions which it will be possible to keep supplied during the drought.

Total number of patients on chaulmoogra oil in some form, including hypodermic medication	304
Total number of patients on special treatments	483
Total number of major operations	39
Total number of minor operations	312

Grand total of cases treated medicinally and surgically for the disease in the period of this report	1, 138
Total number of gallons of milk supplied to the two above mentioned homes and general settlement during the period	2, 373

Bathing facilities continue to be supplied to the various homes as well as the general settlement, and plain and medicated baths are always available when there is fuel for heating purposes, but unfortunately, during the past year there has frequently been a shortage of coal and, therefore, I would recommend if possible, that bath houses be made independent of coal for heating purposes, i. e., the installation of oil burners would, after first initial outlay, be more economical to operate and assure an unfailing supply of hot, plain, and medicated baths, which are otherwise always available. Tar and other antiseptic and cleansing soaps are supplied to all patients who bathe, in regular and sufficient quantities.

General hospital:	
Number of inmates, June 30, 1918	20
Cases admitted during the period:	
Medical	27
Surgical	27
	54
	74
Number of deaths	5
Number discharged	52
	57
Number of inmates June 30, 1919	17
Number of prescriptions filled	904
Number of post-operative and other surgical dressings	5, 275
Number of operations performed:	
Major	29
Minor	118
	147
Greatest number of inmates any one time during the period	29
Number of patients treated medicinally for the disease	21
Number of patients treated surgically for the disease	147

I have nothing but praise to offer for the faithful work performed by Mrs. Haleamau, the matron, and her various assistants. It is frequently a difficult problem here to secure efficient help, especially with reference to cooks and stewards, but the hospital has been fortunate in having the services of Mrs. Haleamau, so that on a few occasions when the cook and his helper became refractory, the matron was able to take right hold of the work until a new servant or servants could be secured. The conduct and discipline of all those concerned in the hospital has been excellent and the hospital continues to be an increasing help and benefit to those who are in need of special medical and surgical treatment and up-building.

Nursling Hospital.—The following data with reference to the Nursling Hospital may be noted:

	Male.	Female.	Total.
Number of babies June 30, 1918	2	4	6
Born during period	7	8	15
Total	9	12	21
Deaths during period	1	2	3
Babies sent to boys' and girls' homes in Honolulu	3	8	11
Total	4	10	14
Number of babies June 30, 1919	5	2	7

Remarks with reference to the Nursling Hospital in the previous report still hold good, and the record made by the matron and her assistants during the period has been very satisfactory.

Epidemics.—As casually noted above there was a mild epidemic of influenza or la grippe, which fortunately was not responsible for many deaths, these occurring only in advanced and marasmatic cases. This epidemic had no relation to the severer type designated "flu," and unquestionably prevalent on some of the other islands at about the same time.

New inmates.—Following is the record under the above heading:

	Male.	Female.	Total.
From Kalihi Hospital, June 29.....	47	13	60
From Lahaina, Maui, Oct. 24.....	1	.....	1
Total.....	48	13	61

From Lahaina, Maui, one suspect, male, voluntarily waived examination at Kalihi and entered the settlement October 24, 1918. While not an advanced case, this patient, a Filipino, showed unmistakable signs of the disease, bacteriological examination sustaining clinical findings.

Sanitation and hygiene.—Tabulated, the work in this department under the same efficient inspector shows the following:

Houses inspected in the district of Kalaupapa.....	423
Yards inspected in the district of Kalaupapa.....	259
Privies condemned in the district of Kalaupapa.....	38
New privies and vaults installed in the district of Kalaupapa.....	9
New cesspools dug in the district of Kalaupapa.....	6
Number of cesspools disinfected.....	23
Number of privies disinfected.....	118
Number of chicken coops disinfected with permanganate.....	35
Number of stagnant pools oiled.....	7
Number of houses fumigated with sulphur.....	17
Number of hog pens removed.....	7
Number of dead cattle destroyed by burning.....	9
Number of dead horses destroyed by burning.....	3
Number of dead dogs buried.....	131
Number of dead chickens buried.....	36
Loads of garbage removed.....	115
Loads of tin cans, etc., removed.....	511
Number of taro patch inspections in the district of Kalaupapa.....	219
Rubbish burned at the dumping grounds, tons.....	71
Total inspections over the whole settlement.....	598

Recommendation.—I wish here to emphasize the great need of an incinerator of a sufficient capacity to destroy and incinerate the immense quantity of offal and waste, which has, during the year, to be carted away to a suitable place where it may be destroyed by burning. Very much of this waste material has to lay exposed to the drying effect of the sun and wind for several days, previous to the possibility of burning, and this is not as it should be. A considerable quantity of this material consists of cotton and other sponges, bandages and dressings, which have necessarily been soiled and wetted in the course of cleansing, surgical operation and dressing, and can not even with the use of kerosene oil be burned until somewhat dried out. There are 300 consecutive daily surgical dressings taken off and reappplied in the five institutions outside of the Baldwin Home, and it may readily be seen that the quantity of this material is too great to allow of its being buried in excavations made for the purpose, and the only method I know of which will be practical, satisfactory, and sanitary, would be its daily incineration in an incinerator of sufficient capacity and draft, which, no doubt, with the necessary material might be constructed with labor here.

Reexamination.—Reexamination of lepers took place in the leper settlement on June 29, 1919, during which 17 cases, male 7, female 10, were reexamined. Drs. Trotter, McDonald, and Goodhue comprised the board of examining physicians, and 12 patients were recommended to the board of health for parole as follows: Male, 5; female, 7; total, 12.

Most every one of the patients paroled were very faithful in taking some one or other form of treatment, and those who successfully passed the examination, certainly deserve the parole which was given to them by the board of health.

In addition to the above, one male patient was paroled by the board of health upon recommendation of the attending physician and data submitted as to his condition, and was discharged September 5, 1918.

In concluding my report I wish to express the deepest appreciation to the president, members and officers of the board of health for unfailing support and attention to my requirements and also to the superintendent of the leper settlement for cheerful and constructive cooperation at all times.

Respectfully,

W. J. GOODHUE, M. D.,
Resident Physician, Leper Settlement.

HONOLULU, HAWAII, June 30, 1919.

HON. SUMNER S. PAXSON,

President, Territorial Board of Health, Honolulu, Hawaii.

SIR: I have the honor to hand you this outline of the work at Kalihi Hospital for the past fiscal year. The first three months of the period, however, are embraced in the term of service of Dr. H. T. Hollman who resigned on October 1, 1918, on which date I was appointed director of the leprosy investigation station by the Surgeon General of the United States Public Health Service, and ordered to assume charge immediately.

The cordial relations and harmonious cooperation existing between the attending physician on the one hand, and the patients and officers of the hospital on the other, have, I am happy to state, been continued throughout the year.

Leprosy is such a chronic, sluggish disease, occurring usually in those otherwise in excellent health, that it requires great patience and fortitude on the part of its victims to live in contentment shut up in a compound of only a few acres in extent. But in spite of their isolation, our patients maintain a splendid morale and esprit de corps. There is a pervading, constant spirit of good cheer and hopefulness which is apparently infectious, for I have observed that our new patients arriving one by one or even in groups from the other islands soon dry their tears and become reconciled as soon as they become acquainted. All are determined to get well and be paroled out. They eagerly take their remedies, unpalatable as they are, without a sign of objection; they submit to deep intramuscular injections, painful as they must be, without a murmur; they are appreciative, grateful, and obedient, all of which, of course, is an inspiration to the medical attendant.

At this point I wish to make public acknowledgment of the valuable assistance in my work received from the superintendent, Mrs. Bessie Clinton, who combines in a wonderful degree the qualities of a sympathetic, kind, and tactful matron, a competent nurse and a strict but just disciplinarian. The needed physical exercises, mental occupation and diversions so essential to the patients' welfare in directing their minds away from their ills, find expression in the care of the animals, the cultivation of flower and vegetable gardens, care of lawns, tree planting, each patient keeping his or her own room in order, maintaining dormitories and grounds tidy, base ball, tennis, croquet, billiards, games and contests, evening entertainments in the assembly hall as staged plays, concerts, movies, dances, etc. All those activities are demanded or fostered and promoted by Mrs. Clinton. Her control and daily oversight of the dietary, the marketing, the kitchen and dining halls have been most satisfactory to me in that a generous regimen of plain, wholesome, well-cooked food, correctly served, is of the utmost importance in fighting leprosy.

Of those released on parole, 2 in September, 4 in December, and 13 in February, and reporting monthly, all are doing well and are in better condition to-day than when they left us. Of the six deaths occurring during the year, three were from leprosy direct, the remaining three were due to intercurrent disease, one each from meningitis, apoplexy, and beriberi. There were two births, the infants being immediately removed from the hospital. Of those transferred to Molokai on June 28, by far the greater number were cases of long standing far advanced before coming in, leaving the more recent or the most promising cases here for further treatment, a considerable number of whom are improving so satisfactorily that at no distant date I will recommend them for parole.

In his annual report for 1916, Dr. W. J. Goodhue, medical superintendent of the settlement on Molokai, expressed the opinion that of all the remedies employed in leprosy, past and present, good, bad, and indifferent, at the head of the list is the old stand-by, chaulmoogra oil. A review of the current literature from all over the world at the present time would indicate that he is correct. We have as yet no specific for leprosy. Great progress is being made, however, in the chemical elaboration and

modification of chaulmoogra oil into products more serviceable than the plain oil, which is nauseating to the taste if taken by the mouth and too thick and heavy for successful hypodermic or intramuscular injection.

Encouraged by favorable reports from abroad of work along these lines, notably that of Sir Leonard Rogers, of Calcutta, Dr. A. L. Dean, president of the college of Hawaii and one of its professors of chemistry, has during the past year, under his own immediate supervision, been supplying us from the college laboratories with a series of ethyl esters from the fatty acids of the oil, which I have been administering, both per os three times a day, and by intramuscular injections weekly, with highly favorable results. The United States Public Health Service supplies the oil in \$250 lots as needed, alcohol by the barrel, empty capsules by the 50,000, etc., while the Territorial board of health has recently furnished a competent laboratory specialist, P. S. Lee, B. S., a recent graduate of the College of Hawaii, to devote his whole time to the work under Dr. Dean, so we are now in a position to place all our patients upon the treatment. Of the different preparations or fractions heretofore employed, results do not yet allow a definite statement of their relative therapeutic value. They are all good and we are searching for the best. Other methods of fractioning the oil are being tried, and injections are being made of fractions prepared by converting the whole oil in the mixed ethyl esters and distilling at reduced pressure. Still another treatment is being given with mixed ethyl esters carrying combined iodine.

Results thus far obtained indicate that the therapeutic action of chaulmoogra oil and its derivatives is not due to the presence of a small quantity of some substance not a fatty acid or an ester thereof. A working hypothesis is that the action is due to the specific effect of the optically active fatty acids of the chaulmoogra acid series which constitute a unique type of fatty acid.

Confused and contradictory statements appear in the literature relative to the origin of the chaulmoogra oil of commerce. Various lots obtained are markedly different. An important step is now being taken toward clearing up the matter. Prof. Rock, of the College of Hawaii, a botanist of wide experience, is traveling in the Orient in the interests of the Hawaiian Sugar Planters' Association to secure seeds of forest trees for experimental planting in Hawaii. Because of the very encouraging results of the treatment now being administered by the United States Public Health Service at Kalihi Hospital, to which their attention had been called by President Dean, the association felt justified in appropriating \$500 to pay Prof. Rock's expenses from Singapore up into Burmah, the native habitat of the trees, notably *Taraxiogenos kurzi* from which the best oil is said to be obtained. He will investigate the whole subject of the production of the oil, including the botany involved, the gathering of the nuts, expression of the oil, etc., and bring back seeds and cuttings for planting.

In conclusion, my thanks are due and extended to you, Mr. President, to Mr. Kirk B. Porter, secretary, and to your entire office force for innumerable courtesies and valued assistance rendered to me throughout the year.

The following statistics are compiled from records of the hospital, the leprosy investigation station, and the board of health:

	Male.	Female.	Total.
Patients under treatment June 30, 1918.....	19	16	35
Patients under treatment during the year.....	95	55	150
Patients under treatment June 30, 1919.....	35	20	64
Examined by official boards during the year.....	82	43	125
Declared lepers.....	76	39	115
Declared nonlepers.....	6	4	10
Reexamined and released on parole.....	7	12	19
Transferred to Settlement, Molokai.....	47	13	60
Deaths during the year.....	5	1	6
Births during the year.....	1	1	2
Unofficially examined and released.....	18	17	35

Surgical dressings.....	4,418
Prescriptions filled.....	1,215

Respectfully submitted.

J. T. McDONALD,
Acting Assistant Surgeon U. S. Public Health Service;
Director U. S. Leprosy Investigation Station;
Medical Superintendent Kahi Hospital.

UNITED STATES PUBLIC HEALTH SERVICE.

Contagious diseases on arriving vessels.—One hundred and forty vessels arrived during the year with contagious and infectious diseases on board, of which there were 90 cases of tuberculosis; 623 of influenza; 28 of varicella, 9 of measles, 22 of mumps, 2 of meningitis, 2 of typhoid, 3 of pertussis, and 1 of poliomyelitis. Cases amongst the personnel of transports were removed to the department hospital at Fort Shafter, while those on other vessels were reported to the board of health for whatever action they deemed necessary.

Influenza first appeared on arriving vessels, the S. S. *Vondel*, July 9, from Japanese and Chinese ports, a total of 14 cases having occurred during the voyage, followed by the S. S. *Grotius* from the same ports, August 13, with a total of 11 cases. No cases of influenza were reported on arriving vessels between August 13 and October 18, when the S. S. *Meikai Maru* arrived from San Francisco with 31 of the crew ill and 3 dead from influenza. Between October 18 and 27, 1918, a total of 19 vessels arrived with influenza on board, 10 of which were from oriental ports and 9 from San Francisco. A total of 623 cases of influenza were reported arriving on vessels during the year with a mortality of 21 deaths.

Fumigation of vessels for mosquitoes.—The fumigation of all vessels arriving from ports of the west coast of Mexico and Central and South America, for the eradication of mosquitoes was continued throughout the year, at the request of the board of health; a total of 13 vessels were so treated.

Aid rendered the Territorial board of health.—During the year the following cases of communicable diseases were admitted and cared for at the quarantine station at the request of the board of health: One case of cerebrospinal meningitis from the Japanese steamship *Tenyo Maru*, 1 case of diphtheria from Honolulu, and 24 cases of influenza from the Japanese steamship *Meikai Maru*. The remains of 8 persons were cremated at the quarantine station during the year, the causes of death being as follows: Leprosy, 7; diphtheria, 1.

NATIONAL GUARD OF HAWAII.

Reorganization.—Immediately after the First and Second Regiments were mobilized, steps were taken to reorganize the National Guard and recruit a regiment. A recruiting campaign was held on Oahu and Hawaii. Considerable correspondence and numerous wireless messages were exchanged with the War Department regarding the status of the National Guard, and on November 28, 1918, a radio was received by the commanding general, Hawaiian Department, authorizing the completion of the organization of the Fifth Regiment.

Company A with 3 officers and 119 enlisted men and Company B with 3 officers and 100 enlisted men, both stationed in Honolulu, were granted Federal recognition on September 5, 1918, and November 8, 1918, respectively. Company I, with 3 officers and 113 enlisted men, and Company K, with 3 officers and 107 enlisted men, stationed at Hilo, Hawaii, were inspected, but to date have not been extended Federal recognition. The Third, Fourth, and Seventh provisional companies, and headquarters, machine gun, and supply companies are being formed.

Because a small appropriation was passed by the last legislature, it has been suggested to the militia bureau that one battalion of Infantry, a headquarters company, machine-gun company, and supply company be maintained, and this plan has been authorized by the militia bureau.

Prospects for a small, but exceedingly efficient National Guard are good. The discharge of officers and enlisted men of the First Hawaiian Infantry, United States Army, makes available a considerable number of well-trained officers and men.

Armory instruction.—Schools for officers and enlisted men in Honolulu are being conducted once a week under the supervision of an officer, inspector-instructor, and a sergeant-instructor from the United States Army, and in Hawaii by the battalion commander; this work is in addition to company drills, and is done on schedules approved by the commanding general, Hawaiian Department.

Organizations disbanded.—The First Separate Company of Engineers, Company B, Signal Corps, and First Separate Troop of Cavalry were disbanded by orders, dated October 11, 1918, upon the approval of the Secretary of War.

Rifle practice.—Considerable gallery and target practice was had during the year as a part of the schedule of instruction for the companies organized and under organization.

Strength.—The strength of the National Guard of Hawaii, June 30, 1919, was: Officers, 26; enlisted men, 688.

UNITED STATES INTERNAL REVENUE SERVICE.

During the half month between the organization of Territorial government and the beginning of the first complete fiscal year the collections amounted to \$7,454.30.

Special tax stamps and certificates of registry, year ended June 30, 1919.

Wholesale liquor dealers.....	13
Retail liquor dealers.....	51
Wholesale dealers, malt liquors.....	3
Retail dealers, malt liquors.....	1
Brewers of 500 barrels or more per annum.....	1
Wholesale dealers in uncolored oleomargarine.....	1
Retail dealers in uncolored oleomargarine.....	56
Manufacturers of playing cards.....	4
Wholesale dealers in denatured alcohol.....	2
Manufacturer of cigars.....	1
Licensed organizations to collect foreign income.....	16
Brokers.....	41
Customhouse brokers.....	11
Pawn brokers.....	2
Ship brokers.....	8
Brokers (owning seats on exchange).....	20
Theaters, \$12.50.....	41
Theaters, \$25.....	26
Theaters, \$37.50.....	4
Theaters, \$50.....	11
Theaters, \$75.....	9
Theaters, \$100.....	5
Public exhibitions.....	42
Billiard and pool tables.....	230
Shooting galleries.....	1

Passenger automobiles for hire	908
Pleasure boats	14
Manufacturers of cigars, at \$4	1
Importers, manufacturers, etc., of narcotics, act 1917	1
Wholesale and retail dealers, of narcotics, act 1917	29
Practitioners, hospitals, etc., of narcotics, act 1917	216
Importers, manufacturers, etc., of narcotics, act 1918	2
Wholesale dealers of narcotics, act 1918	12
Retail dealers of narcotics, act 1918	24
Practitioners, hospitals, etc., of narcotics, act 1918	193
Dealers in untaxed narcotic preparations, act 1918	44
Total	2,042

Internal-revenue receipts and disbursements, fiscal years 1918 and 1919, and 19 complete fiscal years since organization of Territorial government.

	1918	1919	Total, 1901-1919.
Collections on lists	\$1,464.22	\$3,532.21	\$105,115.76
Fermented liquors	55,548.04	4,069.46	457,342.89
Distilled spirits	192,547.75	9,317.24	631,077.66
Distilled spirits, floor taxes, 1918		1,244.88	1,244.88
Cigars and cigarettes	8,511.80	1,433.18	17,005.76
Tobacco and snuff	19,287.50	4,222.87	68,806.50
Cigars, cigarettes, and tobacco, floor tax, 1918		20,847.64	20,847.64
Special taxes, regular	3,397.67	3,600.51	297,135.60
Special taxes, emergency		18,917.49	18,917.49
Special tax, Oct. 22, 1914			35,385.98
Special taxes on narcotics			717.70
Playing cards	1,647.75	3,262.00	18,647.77
Documentary stamps		44,756.08	44,756.08
Documentary stamps, June 13, 1896			68,042.60
Documentary stamps, stock transfer		833.50	833.50
Documentary stamps, Oct. 22, 1914			92,894.86
Proprietary stamps, Oct. 22, 1914			4,938.80
Proprietary stamps, 1918		2,748.17	2,748.17
Proprietary stamps			11,267.34
Corporation income tax	7,146,693.83	4,014,235.39	13,301,908.69
Individual income tax	1,484,700.18	1,133,812.53	3,174,572.02
Wine stamps, Oct. 22, 1914			114,486.06
Opium order forms	15.00	21.20	146.00
Bankers' special taxes			9,772.61
Capital stock tax	120,856.89	122,484.75	294,062.77
Capital stock tax, 1918		200.00	200.00
War excess profits	330,047.73		230,047.73
Estate tax	72,435.15	139,019.70	211,454.85
Wine	109,788.25	15,927.58	125,715.83
Wine, floor taxes, 1918		51.87	51.87
Rectified spirits	1,353.61		1,353.61
Rectified spirits, floor taxes, 1918		3.90	3.90
Special taxes, Sept. 8, 1916	3,666.25		3,666.25
Documentary stamps, Sept. 8, 1915, and Oct. 3, 1917	24,045.13		24,045.13
War tax, admissions and dues	39,847.25	64,827.40	104,674.65
War tax, public utilities	67,764.49		67,764.49
War tax beverages, Oct. 3, 1917	1,069.28	607.52	1,676.80
War tax beverages, 1918		7,982.72	7,982.72
War excise tax	7,153.18	5,004.02	12,157.20
Playing cards tax, 1918		849.78	849.78
Narcotic stamps, 1918		29.25	29.25
War tax, transportation		187,433.03	187,433.03
War tax, insurance		5,515.01	5,515.01
War tax, manufacturers' excise		1,607.28	1,607.28
War tax, consumers' excise, 1918		3,906.03	3,906.03
Total	9,698,840.94	5,831,933.19	19,591,906.56
Disbursements, including salaries, incidental expenses, and refunds	26,008.83	87,823.85	287,968.65
Net	9,660,835.11	5,794,109.34	19,608,969.51

WEATHER BUREAU.

Through the cooperation of the water resources branch of the United States Geological Survey, the number of rainfall substations was increased by 62, making the total of such substations 212. These are divided as follows: Hawaii, 68; Kauai, 54; Lanai, 1; Maui, 43; Molokai, 2; and Oahu, 44. Forty-eight of these report daily maximum and minimum temperatures, while 46 cooperative observers act as weekly weather and crop reporters.

The Hawaiian Volcano Observatory at the volcano of Kilauea, Hawaii, became a part of the United States Weather Bureau on February 15, 1919. Work continued under the immediate supervision of the director previously employed by the Hawaiian Volcano Research Association.

The Weather Bureau and the United States Naval Radio Service cooperate in sending reports of Honolulu weather conditions four times daily over the Pacific Ocean. With the close of the war, masters of vessels at sea have begun supplying return information.

A compilation of data on rainfall, temperature, wind direction, sunshine, with other similar information has been made and will be published as a climatological bulletin of the Hawaiian Islands. This will be the most comprehensive publication of the kind ever issued concerning these islands and should be of much value to all seeking authentic information. The statistics are from the beginning of records, in some cases as far back as 1821.

Very truly, yours,

C. J. MCCARTHY,
Governor of Hawaii.

APPENDIX. ¹

TERRITORIAL REGISTER AND DIRECTORY.

Territorial Officials.

EXECUTIVE

C. J. McCarthy, governor.
C. P. Iaukea, secretary.
Harry Irwin, attorney general.
Delbert E. Metzger, treasurer.
C. T. Bailey, commissioner of public lands.
Lyman H. Bigelow, superintendent of public works.
Vaughan MacCaughy, superintendent of public instruction.
M. G. K. Hopkins, auditor.
W. E. Wall, surveyor.
W. P. Jarrett, high sheriff.
John F. Stone, private secretary to governor.

DELEGATE TO CONGRESS.

J. K. Kalaniana'ole.

JUDICIAL.

J. L. Coke, chief justice supreme court.
W. S. Edings, associate justice supreme court.
S. B. Kemp, associate justice supreme court.
Cornell S. Franklin, first judge, first circuit.
John T. De Bolt, second judge, first circuit.
James J. Banks, third judge, first circuit.
L. L. Burr, judge, second circuit, Wailuku, Maui.
J. W. Thompson, judge third circuit, Kailua, Hawaii.
C. K. Quinn, judge fourth circuit, Hilo, Hawaii.
L. A. Dickey, judge fifth circuit, Lihue, Kauai.

LEGISLATURE.

Senate.—Charles F. Chillingworth, S. L. Desha, Robert Hind, G. P. Kama'ouha, J. W. Russell, H. A. Baldwin, George P. Cooke, H. W. Rice, S. P. Correa, Charles F. King, M. C. Pacheco, Robert W. Shingle, John H. Wise, J. H. Coney, Charles A. Rice.
House.—H. L. Holstein, John K. Kai, Henry J. Lyman, Otto W. Rose, Evan de Silva, E. K. Ka'aua, D. K. Kaupiko, Henry S. Kawewehi, John Brown, L. L. Joseph, L. B. Kaumeheiwa, M. G. Paschoal, A. F. Tavares, E. Wai'aholo, Frank Andrade, Lorin Andrews, H. K. L. Castle, James K. Jarrett, A. Lewis, William T. Rawlins, Robert Ahuna, E. K. Fernandez, George H. Holt, J. S. Kalakiela, Jonah Kumalae, David M. Kupihea, Manuel R. Aguiar, J. S. Chandler, Samuel K. Kaahu, J. Werner.

MISCELLANEOUS.

BOARD OF AGRICULTURE AND FORESTRY.

Arthur H. Rice, president; J. M. Dowsett, W. M. Giffard, A. L. C. Atkinson, H. M. von Holt; C. S. Judd, executive officer.

BOARDS OF APPRAISERS.

Oahu.—J. E. O'Connor, F. E. Steere, Irwin H. Beadle.
Hawaii.—William J. West, Benjamin Rose, Charles R. Shaw.
Kauai.—J. M. Lydgate, J. H. Moragne, J. K. Farley.

BOARD OF COMMISSIONERS OF PUBLIC ARCHIVES.

C. P. Iaukea (chairman ex officio), M. M. Scott, A. G. M. Robertson, R. C. Lydecker (librarian).

¹ This register is as of Aug. 1, 1919.

CIVIL SERVICE COMMISSION FOR CLASSIFIED SERVICE OF BOARD OF HEALTH.

J. S. B. Pratt, W. C. McGonagle, T. J. Fitzpatrick.

BOARD OF REGENTS OF THE COLLEGE OF HAWAII.

W. R. Farrington, chairman; Arthur G. Smith, Mrs. J. R. Ashford, A. Gartley, C. R. Hemenway.

COMMISSIONERS OF DEEDS.

California, T. W. Hobron; New York, Frederick H. Sieberth; Pennsylvania, Louis Karstaedt; Washington, D. C., G. S. Grossman; Province of Quebec, Canada, Adolph Michelson.

BOARD OF DENTAL EXAMINERS.

Dr. M. E. Grossman, Dr. O. E. Wall, Dr. F. E. Clark.

FAIR COMMISSION.

Edwin H. Paris, Samuel Baldwin, James Henderson, Walter F. Sanborn, H. P. Agee.

BOARD OF COMMISSIONERS FOR THE HOME FOR FEEBLE-MINDED.

John R. Galt, John Effinger, Dr. A. L. Andrews, Dr. Ruth A. McKellar, Mrs. Rhoda G. Thayer.

COMMISSIONERS OF FENCES.

Oahu.—Ewa and Waianae: C. A. Brown, E. O. White. *Waialua*: R. Kinney. *Honolulu*: Norman E. Gedge.

Hawaii.—South Kona: L. P. Lincoln, E. K. Kaaua, A. Haile. *Kau*: J. T. Nakai, G. J. Becker, George Campbell. *North Kona*: A. S. Wall, T. Silva, J. Kaelemakula. *North Kohala*: W. S. May, E. K. Kanehailoa, E. K. Akina. *Puna*: G. D. Supe, H. J. Lyman. *Hamakua*: W. J. Rickard, A. L. Moses, J. K. White.

Mau.—Makawao: Edgar Morton, W. Henning, J. G. Freitas. *Molokai*: H. R. Hitchcock, J. G. Munro, S. Fuller.

BOARD OF FISH AND GAME COMMISSIONERS.

Dr. A. L. Dean, Alonzo Gartley, C. Montague Cooke, W. S. Wise, Howard W. Laws.

BOARD OF HARBOR COMMISSIONERS.

L. H. Bigelow (chairman ex officio), D. E. Metzger, Norman Watkins, James Wakefield, W. H. McClellan.

BOARD OF HEALTH.

S. S. Paxson (president), Harry Irwin (ex officio), G. P. Denison, Dr. F. E. Trotter, Dr. W. C. Hobdy, F. Walter Macfarlane, G. J. Waller, jr.

INDUSTRIAL ACCIDENT BOARDS.

Honolulu.—F. E. Steere, A. J. Campbell, F. O. Boyer, A. J. Wirtz, R. B. Booth.

Hawaii.—H. A. Truslow, W. J. Stone, D. Ewaliko, B. K. Baird, H. B. Elliott.

Kauai.—J. M. Lydgate, E. E. Mahlum, H. H. Brodie, J. H. Moragne, G. W. Sahr.

Mau.—W. A. McKay, W. J. Cooper, G. Freeland, G. Weight, W. H. Field.

BOARD OF INDUSTRIAL SCHOOLS.

Valentine Franckx (chairman), Mrs. F. W. Macfarlane, Mrs. A. Lewis, jr., Judge C. S. Franklin (ex officio), Mrs. B. L. Marx, W. P. Jarrett, James A. Rath.

COMMISSIONERS OF INSANITY.

Dr. George Herbert, L. J. Warren, Dr. C. B. Cooper.

BOARD OF COMMISSIONERS OF PUBLIC INSTRUCTION.

Honolulu.—L. G. Blackman, Mrs. E. McCandless.

Hawaii.—East: W. H. Smith; west: Samuel P. Woods.

Mau.—D. C. Lindsay.

Kauai.—E. A. Knudsen.

BOARD OF COMMISSIONERS FOR LAHAINALUNA SCHOOL.

D. C. Lindsay (chairman ex officio), H. McCubbin, Samuel Baldwin, C. C. Crowell.

BOARD OF PUBLIC LANDS.

W. H. C. Campbell, J. F. Brown, Edgar Henriques, Antonio D. Castro, J. W. Waldron, A. Horner.

TRUSTEES OF THE LIBRARY OF HAWAII.

C. H. Atherton (president), A. Gartley, Mrs. E. C. McCandless, W. D. Westervelt, F. E. Blake, H. B. Restarick, A. Lewis.

BOARDS OF LICENSE COMMISSIONERS.

Honolulu.—R. A. Cooke, J. O. Carter, C. A. Long, E. W. Sutton, F. D. Lowrey.
Hawaii.—T. C. White, R. T. Guard, J. A. M. Osorio, S. P. Woods, J. T. Moir.
*Mau*i.—D. C. Lindsay, C. D. Lufkin, T. B. Lyons, D. H. Case, W. F. Kaae.
Kauai.—B. D. Baldwin, W. D. McBryde, G. N. Wilcox, W. H. Rice, sr., W. F. Sanborn.

LOAN FUND COMMISSIONS.

Oahu.—L. H. Bigelow (chairman ex officio), J. J. Fern (ex officio), A. D. Castro, E. G. Duisenberg, Lester Petrie.
Hawaii.—L. H. Bigelow (chairman ex officio), F. R. Greenwell, O. L. Sorenson, A. C. Wheeler, E. H. Lyman.
*Mau*i.—L. H. Bigelow (chairman ex officio), P. Cockett, R. A. Wadsworth, W. F. Pogue.
Kauai.—L. H. Bigelow (chairman ex officio), H. D. Wishard, A. Menegfolio, F. Gay, W. D. McBryde.

DISTRICT MAGISTRATES.

Oahu.—Honolulu: J. B. Lightfoot, A. D. Larnach. Ewa: S. Hookano. Koolauloa: J. L. Pao. Waialua: E. Hore, W. S. Wond. Koolaupoko: J. K. Paele, H. C. Adams. Waianae: B. P. Zablan.
Hawaii.—South Kona: R. Makahalupa. South Hilo: T. E. M. Osorio, W. H. Smith. North Kohala: R. H. Atkins. North Kona: D. K. Baker. Puna: J. S. Ferry, S. H. Haaheo. Kau: W. H. Hayselden. South Kohala: David H. Makekau. North Hilo: E. K. Simmons. Hamakua: M. S. Botelho, R. H. Makekau.
Kauai.—Lihue: J. L. Hjorth, J. H. Kaiwi. Waimea: C. B. Hofgaard, J. K. Kapuniai. Kawaihau: R. Puuki, M. S. Henriques. Hanalei: Wm. Huddy. Koloa: D. K. Kapahee.
*Mau*i.—Makawao: Manuel C. Pacheco, G. K. Kunukau. Hana: H. E. Palakiko, G. P. Kauimakaole. Lahaina: C. B. Cockett. Wailuku: W. A. McKay, H. C. Moesman.
Molokai.—C. C. Conradt. Kalawao: Joseph Conradt, J. D. McVeigh.

BOARD OF MEDICAL EXAMINERS.

Dr. R. W. Benz, Dr. G. A. Batten, Dr. J. R. Judd.

BOARD OF REGISTRATION OF NURSING.

Dr. G. A. Batten, Dr. J. R. Judd, Miss E. Dutot, Miss M. Johnson.

BOARD OF EXAMINERS IN OPTOMETRY.

Dr. L. E. Capps, Dr. A. Y. Yee, Dr. H. K. Hope.

BOARD OF PHARMACY.

A. J. Gignoux, Dr. J. C. O'Day, D. G. Webber.

BOARDS OF PRISON INSPECTORS.

First judicial circuit.—E. H. Wodehouse, J. W. Waldron, J. M. Dowsett.
Second judicial circuit.—W. Henning, George Freeland.
Third judicial circuit.—L. S. Aungst, S. P. Woods, Arthur J. Stillman.
Fourth judicial circuit.—G. Cool, William Weight, C. R. Shaw.
Fifth judicial circuit.—J. M. Lydgate, A. S. Wilcox, H. Wolters.

BOARDS OF REGISTRATION.

First representative district.—R. T. Guard (chairman), David Hewahewa, J. Vierra.
Second representative district.—Jas. F. Woods, A. G. Patten, W. H. Lainaholo.
Third representative district.—T. Clark, W. E. Bal., jr., J. Ferreira.

Fourth and fifth representative districts.—S. F. Chillingworth, A. V. Gear, W. W. Buckle.

Sixth representative district.—J. Hjorth (chairman), W. Kaiawe, J. H. K. Kaiwi.

TAX APPEAL COURTS.

First judicial circuit.—J. Milton, J. H. Fisher, R. B. Booth.

Second judicial circuit.—George Freeland, C. D. Luffkin, George Weight.

Third judicial circuit.—W. V. Lee, F. R. Greenwell, Thomas Aiu.

Fourth judicial circuit.—R. A. Lucas, W. J. Stone, C. M. Hudson.

Fifth judicial circuit.—A. Horner, E. M. Cheatham, J. H. Moragne.

HAWAII TOURIST BUREAU.

Oahu.—W. C. McGonagle.

Hawaii.—James Henderson.

Maui.—W. O. Aiken.

Kauai.—W. H. Rice.

PUBLIC UTILITIES COMMISSION.

W. T. Carden (chairman), A. J. Gignoux, I. M. Stainback.

BOARD OF VETERINARY EXAMINERS.

Dr. V. A. Norgaard, Dr. J. C. Fitzgerald, Dr. W. T. Monsarrat.

WAIKIKI SANITATION, RECLAMATION, AND IMPROVEMENT COMMISSION.

Lyman H. Bigelow, John H. Wilson, C. T. Bailey, C. W. C. Deering.

Federal Officials.

POST OFFICE DEPARTMENT.

Inspector, F. W. Vaille; postmaster, D. H. MacAdam; assistant postmaster, W. C. Petersen.

TREASURY DEPARTMENT.

Customs division.—Collector, M. A. Franklin; special deputy collector, R. Sharp.

Internal Revenue Service.—Collector, H. Hathaway; chief deputy collector, W. G. Ashley.

Public Health Service.—Surgeon, F. E. Trotter.

DEPARTMENT OF AGRICULTURE.

Hawaii Experiment Station.—Agronomist in charge, J. M. Westgate.

Weather Bureau.—Meteorologist in charge, L. H. Daingerfield.

DEPARTMENT OF LABOR.

Immigration Service.—Inspector in charge, R. L. Halsey.

DEPARTMENT OF COMMERCE.

Lighthouse Service.—Superintendent in charge, nineteenth lighthouse district, A. E. Arledge.

GEOLOGICAL SURVEY.

James E. Stewart, district engineer in charge Hawaii district.

DEPARTMENT OF JUSTICE.

United States district court.—J. B. Poindexter, H. W. Vaughan, judges.

United States district attorney.—S. C. Huber.

Marshal.—J. J. Smiddy.

Clerk.—A. E. Harris.

WAR DEPARTMENT.

Hawaiian Department.—Maj. Gen. Charles G. Morton, United States Army, commanding.

Aide-de-Camp.—Second Lieut. Norman C. Caum, First Hawaiian Infantry.

Department staff.—Chief of staff, Maj. Edward F. Witsell; department inspector, Maj. Edward C. Wallington; department judge advocate, Lieut. Col. Edward K. Massee; department quartermaster, Col. R. A. Schofield; Department surgeon, Col. William P. Kendall; department engineer, Col. Henry C. Newcomer; department

ordnance officer, Col. Kenneth Morton; department signal officer, Maj. Leigh F. J. Zerbee; department air-service officer, Lieut. Col. Bert M. Atkinson; department inspector of small-arms firing practice, Lieut. Col. Ziba L. Drollinger; officer in charge of militia affairs and department intelligence officer, Lieut. Col. Charles S. Hoyt; department motor transport officer, Lieut. Col. Reuben Miller; department morale officer, Maj. Milton R. Fisher.

Additional staff.—Assistants to department quartermaster: Lieut. Col. Fred Buckley, Maj. Richard Bolton, Maj. Harry G. Field, Capt. John S. Scally, Capt. Herbert E. Wescott, Capt. William G. Allen, Capt. Wilbur C. Woodward, Capt. Augustus M. McMullen, Capt. Leslie C. Thompson; dental surgeon, headquarters, Hawaiian Department: Maj. Terry P. Bull; acting department adjutant, Maj. Henry B. Lewis; attending surgeon, Maj. Edward R. Lindner; assistant to department surgeon, Capt. Lloyd E. Case; assistants department air-service officer, Maj. John B. Brooks and Capt. Lee W. Felt; in charge of division of finance and deputy zone finance officer, Maj. William A. MacNicholl; assistant to department judge advocate, Maj. Ingram M. Stainback; deputy zone property auditor, Capt. William A. Cryderman; assistants to deputy zone finance auditor, Capt. Benjamin Wall and Second Lieut. Harry C. Noonan; assistant to department adjutant, department casual officer, personnel adjutant, Capt. Morgan Washburn; assistant to department ordnance officer, assistant to deputy zone supply officer, assistant to department and motor transport officer, First Lieut. Alfred J. McMullen; professor of military science and tactics, Kamehameha Schools, Honolulu, Hawaii, First Lieut. John C. Cleveland.

ATTACHED.

Assistant to department intelligence officer, Maj. John A. Baird
 Assistant to department engineer, Capt. Gilbert D. Fish.
 Air-service disbursing officer, Capt. Richard S. Haines.
 Assistant to department engineer, First Lieut. Henry M. Underwood.
 Department insurance officer, Second Lieut. Clyde T. Welch.
 Department hospital, commanding, Lieut. Col. Frank L. Putman.
 Schofield Barracks, commanding, Brig. Gen. Henry C. Hodges, jr.
 Coast defenses of Oahu, commanding, Col. Thomas Ridgway.
 Fort Shafter, Hawaii, commanding, Col. Elliot M. Norton.
 Luke Field, Ford Island, commanding, Capt. George C. Furrow, J. M. A.

FOURTEENTH NAVAL DISTRICT.

Naval Station, Pearl Harbor.—Rear Admiral W. B. Fletcher, commandant; Lieut. F. G. W. Cooper, aide to commandant; public works officer, Commander George A. McKay; surgeon, Lieut. D. Corey; engineer officer, Lieut. Commander R. E. Carney; construction officer, Lieut. G. A. Lazar; supply officer, Commander David C. Crowell.

Receiving ship, Pearl Harbor.—Commanding officer, Ensign E. I. Parker; supply officer, Lieut. W. H. Abbey.

Disbursing and accounting office.—Disbursing officer, Lieut. H. P. Tichenor.

United States Naval hospital.—Commanding officer, Capt. C. P. Kindleberger; assistant surgeons, Lieuts. H. B. Lehmberg and F. N. Pugsley; dentist, A. E. Nichols.

Old naval station, Honolulu.—Officer in charge, Lieut. H. J. Duffy.

Information.—Intelligence officer, Lieut. Wilbur Morse; district communication superintendent, Lieut. Commander E. C. Raguet; accounting officer, Lieut. J. W. Caum; assistant district communication superintendent, Lieut. P. D. Allen.

U. S. S. Navajo.—Commanding officer, Ensign E. I. Parker.

U. S. S. Monterey.—Commanding officer, Bradford Barnett; supply officer, Lieut. W. H. Abbey; executive officer, Lieut. W. C. Carpenter; surgeon, Lieut. Grover Baldwin; engineer officers, Ensigns F. L. Lanham, A. R. Maccartney, and H. T. Hausten.

United States marine barracks.—Commanding officer, Lieut. Col. John C. Beaumont.

One hundred and seventeenth Company.—Commanding officer, Capt. T. M. Raymond.

Barracks detachment.—Commanding officer, Capt. T. A. Tighe.

One hundred and forty-third Company.—Commanding officer, Capt. Hans O. Martin.

One hundred and eighteenth Company.—Commanding officer, Capt. C. A. Smith.

Ninety-second Company.—Commanding officer, Lieut. C. F. Morrison.

Division 14, United States submarine force.—Commanding, F. X. Gygas.

U. S. S. Beaver.—Lieut. Commander J. A. Logan.

Submarine R-15.—Lieut. Commander G. C. Hitchcock; *R-16*, Lieut. Commander C. Y. Johnston; *R-17*, Lieut. Commander R. R. Thompson; *R-18*, Lieut. Commander J. A. Crutchfield; *R-19*, Lieut. Commander W. F. Callaway; *R-20*, Lieut. Commander A. E. Montgomery.

NEWSPAPERS IN HAWAII.

Hilo, Hawaii County:

A Setta (Portuguese) (weekly).
Filipino People (Wednesday and Saturday).
Hawaii Herald (weekly).
Hawaii Mainichi (Japanese) (evening; except Sunday).
Ka Hoku o Hawaii (Hawaiian) (weekly).
KeOlao Hawaii (Life of Hawaii) (Hawaiian) (weekly).
O Facho (Portuguese) (weekly).
Post Herald (evening; except Sunday).
Tribune (morning; except Monday).

Honolulu, Honolulu County:

Ang Abyan (The Friend) (Tagalog, Visayan, and English) (semimonthly).
Bulletin of the Hawaiian Volcano Observatory (monthly).
Chee Yow Shin Po (Liberty News) (Chinese) (Monday, Wednesday, and Friday).
Friend (monthly).
Hawaiian Church Chronicle (monthly).
Hawaiian Forester and Agriculturist (monthly).
Hawaiian Gazette (Tuesday and Friday).
Hawaii Hochi (Japanese) (daily).
Hawaii Shinpo (Japanese and English) (morning; except Monday).
Hon Mun Bo (Chinese) (Monday, Wednesday, and Friday).
Ka Hoaloha (The Friend) (Hawaiian and English) (monthly).
Ka Punhonua o na Hawaii (Hawaiian Observer) (Hawaiian) (Friday).
Ke Aloha Aina (Hawaiian) (weekly).
Mid-Pacific Magazine (monthly).
New Freedom (weekly).
Nippu Jiji (Japanese and English) (evening; except Sunday; Sunday morning).
Nupepa Kuokoa (Hawaiian) (weekly).
O Luso (Portuguese) (weekly).
Pacific Commercial Advertiser (morning; except Sunday).
Paradise of the Pacific (monthly).
Star-Bulletin (evening; except Sunday).
Star-Bulletin (Tuesday and Friday).
Sun Chung Kwock Bo (Chinese) (Tuesday, Thursday, and Saturday).
Sunday Advertiser (weekly).
Tomo (Japanese) (monthly).
Yau Bo (The Friend) (Chinese and English) (monthly).

Lihue, Kauai County:

Garden Island (weekly).
Kauai Shinpo (Japanese) (weekly).

Wailuku, Maui County:

Daily Wireless (evening; except Sunday).
Maui News (weekly).

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